No. [redacted] 146

IN THE

Supreme Court of the United States

OCTOBER TERM, [redacted] 1970

ABEX CORPORATION, *Petitioner*

v.

FEDERAL TRADE COMMISSION, *Respondent*

PETITION FOR A WRIT OF CERTIORARI TO THE UNITED STATES COURT OF APPEALS FOR THE SIXTH CIRCUIT

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Abex Corporation petitions for a writ of certiorari to review the judgment of the United States Court of Appeals for the Sixth Circuit entered in the above cause on January 8, 1970, and its judgment of February 3, 1970, denying rehearing.

OPINIONS BELOW

The opinion of the court of appeals is reported at 420 F. 2d 928; it is reproduced as Appendix B (*infra*, pp. 2a-10a). The opinion of the Federal Trade Commission and the initial decision of the hearing examiner are not officially reported; they are reproduced as Appendix E (*infra*, pp. 15a-57a) and Appendix F (*infra*, pp. 58a-128a), respectively.

JURISDICTION

The judgment of the court of appeals, which modified and affirmed the order of the Federal Trade Commission, was entered on January 8, 1970 (Appendix A, *infra*, p. 1a). A petition for rehearing was denied on February 3, 1970. (Appendix C, *infra*, p. 11a). The jurisdiction of this Court is invoked under 28 U.S.C. § 1254(1).

QUESTIONS PRESENTED

1. Section 11(b) of the Clayton Act empowers the Federal Trade Commission to order a corporation it has found in violation of Section 7 of that Act to cease and desist from the violation and "divest itself" of the stock or assets unlawfully held. The question is whether Section 11 implicitly grants the Commission additional power to prohibit the corporation from making future acquisitions of stock or assets of other firms which were not parties to the acquisition found unlawful.

2. The Commission ruled that the acquisition involved here lessened competition in a submarket which it constructed from statements in the "promotional

claims" of three producers of the submarket products. The other evidence of record was evaluated solely to determine whether it "vitiate[d]" or "negate[d]" the existence of that submarket. The question is whether in so ruling the Commission employed an improper legal standard of evidentiary review.

STATUTES INVOLVED

1. Section 7 of the Clayton Act of October 15, 1914, 38 Stat. 731, as amended, 15 U.S.C. § 18, reads in pertinent part as follows:

> No corporation engaged in commerce shall acquire, directly or indirectly, the whole or any part of the stock or other share capital and no corporation subject to the jurisdiction of the Federal Trade Commission shall acquire the whole or any part of the assets of another corporation engaged also in commerce, where in any line of commerce in any section of the country, the effect of such acquisition may be substantially to lessen competition, or to tend to create a monopoly.

2. Section 11(b) of the Clayton Act, 38 Stat. 734, as amended, 15 U.S.C. § 21(b), provides as follows in pertinent part:

> If . . . the Commission . . . shall be of the opinion that any of the provisions of said sections [2, 3, 7 and 8 of this Act] have been or are being violated [by any person], it . . . shall issue and cause to be served on such person an order requiring such person to cease and desist from such violations, and divest itself of the stock, or other share capital, or assets, held or rid itself of the directors chosen contrary to the provisions of sections 7 and 8 of this Act, if any there be. . . .

STATEMENT

This is an action under Section 7 of the Clayton Act, 15 U.S.C. § 18, in which the Federal Trade Commission found that Abex Corporation's acquisition of S. K. Wellman Company was unlawful. The pertinent facts are as follows:

1. Petitioner Abex Corporation ("Brake Shoe")[1] is engaged in the manufacture and sale of railroad products, hydraulic products, castings and "friction materials" (*e.g.*, brake linings, clutch facings and transmission parts). In 1962, the year prior to the merger, the company's total friction material sales were $17.7 million (App. F, p. 62a); its sales of "sintered metal" friction materials were $3.5 million (*id.* at 128a).

S. K. Wellman Company ("SKW") was a small, single-line company engaged primarily in the production of sintered metal friction materials at one plant in Bedford, Ohio. It was a closely-held private corporation, with stock ownership confined to the Wellman family and a few key employees. (J.A. 394-96, 2052-56, 2367, 2435).[2] SKW's 1962 sales of sintered metal materials were $11.2 million (App. F, p. 128a).

2. The Commission's complaint charged that the Brake Shoe-SKW merger violated Section 7 in the markets for "friction materials in general" and "sin-

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[1] At the time the action commenced Abex Corporation was named American Brake Shoe Company. Petitioner adopted its present name on April 26, 1966, and thereafter became a wholly owned subsidiary of Illinois Central Industries, Inc. Petitioner was referred to as "Brake Shoe" during the proceedings below.

[2] "J.A. ——" citations are to the printed record in the court of appeals. "CX——" refers to Commission exhibits which are reproduced in Volume VI of the printed record.

tered metal friction materials in particular" (App. F, p. 60a). Friction materials transmit, convert or retard the energy of motion; and, as mentioned above, they are used in brake and clutch assemblies and transmissions (*e.g.*, CX 89, J.A. 2878; J.A. 1789-91).

Friction materials are made from a variety of substances. Commonly used organic substances are cellulose (paper), cork and rubber. Homogeneous metals such as steel, phosphor bronze, and sheet bronze are also used. The powdered or sintered metals used include copper, iron and ceramics. (See App. F, p. 73a, n. 38.) The commercially utilized mixes of metallic and non-metallic powders are practically unlimited (J.A. 348-49, 1066, 1142-43, 2114-15).

Despite their different compositions, all friction materials have important elements in common. Chief among these is their functional interchangeability. In this regard the hearing examiner found, and the Commission accepted his finding, that "sintered metal friction materials and organic friction materials are interchangeable in a considerable number of applications" (App. F, p. 102a; see App. E, pp. 31a-32a).

Friction materials are purchased by manufacturers of automotive vehicles (*e.g.*, passenger cars) and industrial equipment (*e.g.*, cranes); manufacturers of brake, clutch and transmission assemblies; and jobber and other aftermarket distributors who resell to vehicle and equipment users (see App. F, p. 72a). The functional interchangeability of the various friction materials allows buyers a wide range of choices, enabling them to "tailor specific applications to the best of [their] possible knowledge, based on how [the friction material] is being used in the particular applica-

tion (J.A. 1340; see J.A. 2284). As a result, buyers are able to select the friction material they find most desirable in terms of "overall economies" (J.A. 1591), and rivalry in the marketing of these materials is pervaded with "a vigorous, competitive spirit" (J.A. 1723; see J.A. 1644-45, 2233-34, 2240, 2268).

3. The hearing examiner held that the acquisition violated Section 7. He found that all friction materials were "a commercially significant line of commerce and a meaningful relevant product market" and that sintered metal friction materials were a relevant product submarket (App. F, p. 103a). His proposed order required divestiture of SKW and prohibited petitioner from acquiring, for a period of ten years, without Commission approval, any corporation engaged in the "production or sale of friction material" (App. F, pp. 126a-127a).

4. The Commission[3] reversed the hearing examiner's finding of illegality in the overall friction material market because the agency's market share statistics were unreliable. It affirmed his findings that all friction materials comprised a market, that sintered metal friction materials constituted a submarket, and that there was a violation in the submarket. (App. E, pp. 17a-18a, 50a.)

The Commission predicated its submarket finding upon statements in promotional claims made by Brake Shoe, SKW and Raybestos-Manhattan Company, another producer of friction materials. In fact, as the agency viewed it, the ultimate question to be decided on this point was—

> whether the testimony and other evidence adduced in this proceeding vitiates the finding on

[3] Commissioner Nicholson did not participate (App. E, p. 57a).

> this point which Brake Shoe's and Wellman's promotional claims considered alone would justify." [*Id.* at 23a.]

Answering that question, the Commission ruled that the other evidence and testimony did not "negate" the finding "compelled by the promotional claims . . ." (*id.* at 25a).

Brake Shoe's evidence of friction material interchangeability was dismissed by the agency with the following remark: "[w]hatever the degree of substitutability shown here the products are not so identical as to justify ignoring the differences between them plain on the face of this record" (*id.* at 32a). Finally, the Commission adopted the examiner's divestiture order, but limited his proposed ban on future acquisitions to firms manufacturing or selling "sintered metal" friction materials (App. D, p. 13a).

5. The Sixth Circuit affirmed (App. A, p. 1a). In a terse opinion, which quotes from the promotional claims given dispositive weight by the Commission (App. B, pp. 4a-5a), the Court concluded that the record contained substantial evidence of a submarket of sintered metal friction materials.[4]

REASONS FOR GRANTING THE WRIT

This case presents two important questions involving the proper enforcement of the antitrust laws by the Federal Trade Commission. The first arises from that part of the Commission's order which, as ap-

[4] The court modified the Commission's order by excising the ban on future acquisitions of firms engaged in the "sale" of sintered metal friction materials. The court did not disturb the agency's ban relating to firms engaged in "production" of those materials. (*Id.* at 10a.)

proved by the court of appeals, would prohibit petitioner for a period of ten years from "acquiring . . . without the prior approval of the Federal Trade Commission, the whole or any part of the stock, share capital, or assets of any corporation engaged in commerce and in the production of sintered metal friction material" (App. D, p. 13a).

The question whether the Commission has power to ban future acquisitions in redressing violations of Section 7 of the Clayton Act was left open by this Court's decision in *United States* v. *duPont & Co.*, 366 U.S. 316 (1960). The Solicitor General there took the position that—

> [i]n a proceeding by the Federal Trade Commission to enforce Section 7, Section 11 of the Clayton Act gives the Commission no discretion in choice of remedy—if it finds a violation of Section 7, it "shall issue" an order requiring the offender to "divest itself of the stock . . . held" contrary to Section 7's provisions. *The Commission is thereby commanded to order stock divestment* and, as held in *Federal Trade Commission* v. *Western Meat Co.*, 272 U.S. 554, and *Arrow-Hart & Hegeman Electric Co.* v. *F.T.C.*, 291 U.S. 587, *it is authorized to grant no other form of relief.*[5]

This Court expressly declined to decide whether the Commission's remedial powers were "so limited." 366 U.S. at 328 n. 9.

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[5] Brief for the United States in Opposition to Motions to Affirm in *United States* v. *duPont & Co.*, No. 55, O.T. 1960, p. 4 (emphasis added). The same position was taken in the Government's brief on the merits (p. 23), where it was argued that divestiture "is not only a remedy which the Commission has the duty to apply, but . . . it is the only one which it is authorized to grant."

We contend that the Solicitor General's position in *duPont* is correct. In a Section 7 merger action divestiture is "the only remedy presently available to the FTC." See Note, 79 Harv. L. Rev. 391 (1965). The Court should grant this petition and reverse the Sixth Circuit, finally and correctly resolving the important question left open in *duPont*.

The second question presented cuts across the broad range of statutes enforced by the Commission and goes to the heart of the administrative decision-making process. The agency's delineation of a submarket in the instant case was based upon three companies' "promotional claims considered alone" (App. E, 23a). Looking toward the evidence introduced by Brake Shoe "in the course of its defense," the Commission ruled that (*id.* at 25a):

> That testimony, taken as a whole, however, *does not negate the finding compelled by the promotional claims.* . . . [Emphasis added.]

The Commission's approach misconstrues the fact-finding function and seriously undermines the right of respondents in agency proceedings to a fair and impartial decision based upon the entire record. In *Cinderella Career & Finishing Schools, Inc.* v. *FTC*, No. 22,624 (decided March 20, 1970), the District of Columbia Circuit held that the Commission is not free to ignore some of the evidence in the record in reaching its decision.[6] It is equally impermissible and unfair for the Commission to base a critical finding on one category of evidence—particularly promotional claims, the

[6] "It is clear what the Commissioners did here was to review selected parts of the record . . . while ignoring other matters of record . . ." *Id.* at slip op. 5 n. 3.

least probative evidence in the record (see *infra*, pp. 14-15)—and thereafter consider the remaining evidence solely to determine whether it negated that finding. The Court should grant this petition and rule that the Commission cannot as a matter of law relegate to second-class status evidence militating against the allegations of the complaint.

I

Section 11 of the Clayton Act, 15 U.S.C. § 21(b), is the sole source of the Commission's remedial power in Section 7 proceedings. It authorizes the Commission to redress violations by ordering the acquiring company—

> to cease and desist from such violations, and divest itself of the stock or other share capital, or assets, held. . . .

The quoted words obviously contain no express grant of power to prohibit future acquisitions.[7] On the contrary, the statutory language fairly reflects the view prevailing at the time the Clayton Act was passed. Congress intended that the Commission's remedial power should extend no farther than necessary to prevent continuance of specific unlawful activity. Senator Reed, a leading participant in the legislative debates, succinctly summed up the general understanding in the following words:

> All the trade commission can do is to issue its order that the practice be stopped. . . . [51 Cong. Rec. 14225 (1914).]

For nearly fifty years after its enactment Section 11 was construed in accord with the expressed intention

[7] The Commission has conceded this much. See *Ekco Products Co.*, CCH Trade Reg. Rep. (1963-65 Trans. Binder) ¶ 16,879, p. 21,904 n. 9 (1964).

of its framers. Thus, in 1934, this Court held that that section "specifies *the remedy* which the Commission may apply, *namely*, that it may, after hearing, order the violator to divest itself of stock held contrary to the terms of the Act." *Arrow-Hart & Hegeman Electric Co.* v. *FTC*, 291 U.S. 587, 594-95 (emphasis added); see *FTC* v. *Western Meat Co.*, 272 U.S. 554, 559 (1926).[8] And the Commission, through 1962, never ordered a ban on future acquisitions in a litigated Section 7 proceeding.[9] Abruptly, in 1963, the agency changed course and prohibited future acquisitions in a contested order in *Luria Bros. & Co.*, 62 F.T.C. 243. Similar orders have since been entered by the Commission in a number of litigated cases, in addition to *Ekco Products, supra*, and the instant case.[10]

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[8] The 1950 amendments to the Clayton Act, 64 Stat. 1125, invalidated the *Arrow-Hart* holding to the extent they empowered the agency to order divestiture of assets as well as stock. Those amendments left untouched, however, the holding that the Commission "has not the additional powers of a court of equity to grant other and further relief . . . ." 291 U.S. at 598.

[9] In that year a single Commissioner filed a separate opinion in *Foremost Dairies, Inc.*, 60 F.T.C. 944 (1962), unsuccessfully urging that a ban be ordered to arrest continuation of a "merger trend" in the industry, *id.* at 1098.

The Commission had included future acquisition bans in some consent orders dating from the late 1950's. See, *e.g.*, *The Vendo Co.*, 54 F.T.C. 253, 258-59 (1957); *Automatic Canteen Co.*, 54 F.T.C. 1831, 1842 (1958); *Continental Baking Co.*, 60 F.T.C. 1183, 1193 (1962).

[10] See, *e.g.*, *Beatrice Foods Co.*, CCH Trade Reg. Rep. (1965-67 Trans. Binder) ¶ 17,398 (1965); *National Tea Co.*, CCH Trade Reg. Rep. (1965-67 Trans. Binder) ¶ 17,463 (1966); *Dean Foods Co.*, CCH Trade Reg. Rep. (1965-67 Trans. Binder) ¶ 17,765 (1966); *United States Steel Corp.*, 3 CCH Trade Reg. Rep. ¶ 18,626 (1968); *Seeburg Corp.*, 3 CCH Trade Reg. Rep. ¶ 18,464 (1968); *Mississippi River Fuel Corp.*, 3 CCH Trade Reg. Rep. ¶ 18,801 (1969).

In *Ekco Products*, *supra* at pp. 21,904-05, the Commission attempted to justify its order by asserting that its "powers to grant relief in respect to unlawful corporate acquisitions are broadly equitable," and the order in question was necessary "to restore, so far as is practicable, competitive conditions to at least the state of health which they might have been expected to enjoy but for the unlawful conduct." While this rationale may serve to justify some remedial powers claimed in *Ekco* (such as the power to frame divestiture orders of sufficient breadth to include after-acquired assets), it cannot justify a blanket prohibition of future acquisitions. Those prohibitions do not look toward "restoration" of competitive conditions; rather, as the Commission forthrightly recognized below, they seek to govern market conditions in the future, *i.e.*, "to safeguard competition over the long run" (App. B, p. 56a).

The Commission, however, has no statutory mandate to carry out that aim by banning future acquisitions. While the Clayton Act's admitted purpose is to protect competition, the Act achieves this purpose by proscribing specifically defined offenses and empowering the Commission to order a violator to "cease and desist" from those offenses and, in Section 7 actions, to "divest itself of the stock . . . or assets held." The Commission can do no more.

The court below never came to grips with the problem. It upheld the challenged order on the following analysis (App. B, p. 10a):

> We read the statute as authority for the remedy chosen by the Commission.

The court cited *Ekco Products Co.* v. *FTC*, 347 F. 2d 745 (7th Cir. 1965), *FTC* v. *Dean Foods Co.*, 384 U.S.

597 (1966), and *American Cyanamid Co.* v. *FTC*, 363 F. 2d 757 (6th Cir. 1966), as support for its holding. Those decisions are inapposite.[11]

In *Dean Foods* this Court held that the Commission had standing under the All-Writs Act to seek a preliminary injunction. The decision has no bearing on post-acquisition remedial powers. In *American Cyanamid* the Commission's order that certain patents be licensed for a reasonable royalty did no more than curtail the practice found unlawful—the use of improperly obtained patents "for the purpose of excluding competition." 363 F. 2d at 769.

It is of course true that both before and after the *duPont* decision (see *supra*, p. 8) the Court has recognized a broad discretion in the Commission to formulate remedial orders; but in the exercise of this discretion the Commission has never been permitted to venture beyond the pertinent statute's remedial objective—*i.e.*, to prevent continuation of the specific violation found. See *FTC* v. *National Lead Co.*, 352 U.S. 419, 430 (1957); *FTC* v. *Henry Broch & Co.*, 368 U.S. 360, 364 (1962); *FTC* v. *Ruberoid Co.*, 343 U.S. 470, 473 (1952). Mr. Justice Clark, writing for the Court in *National Lead*, pointedly observed that, "[a]s the Court has said many times before, the Commission may exercise only the powers granted it by the Act." 352 U.S. at 428. The future acquisition ban in the instant case goes beyond those powers and unlawfully

[11] The judicial opinion in *Ekco Products*, as well as that in *Luria Bros.*, the only other court opinion dealing with the issue, is as barren of analysis as the opinion below. See *Ekco Products Co.* v. *FTC*, *supra* at 753; *Luria Bros. & Co.* v. *FTC*, 389 F.2d 847, 865 (3rd Cir. 1968). Indeed, the question of the agency's power to ban future acquisitions was not briefed before the court of appeals in either case. See Brief for Petitioner in *Luria*, No. 14,402, 3rd Cir., p. 149; Brief for Petitioner in *Ekco*, No. 14,773, 7th Cir.

interferes with competitive forces which Congress intended to leave unfettered. It should be stricken from the Commission's order.

II

The established Commission procedures for hearing and evaluating evidence "are designed to provide for proceedings in which both the Commission and the responding party have a fair and equal opportunity to present exhibits and witnesses designed to establish the legitimacy of their argument." See *Cinderella Finishing Schools, supra* at slip op. 9. This purpose is effectively thwarted where, as here, the Commission based a critical finding upon statements in "promotional claims" introduced in support of the complaint allegations and considered all the evidence introduced "in the course of [Brake Shoe's] defense" solely to determine whether it vitiated that finding (see App. E, p. 25a). Fair procedure mandates that all evidence in the record be considered as a whole. And it prohibits *a priori* establishment of a hierarchy of evidentiary values, with evidence introduced to uphold the complaint being elevated to a preferential position. Once the Commission has accorded certain evidence primary status, it is immaterial how it disposes of the remaining evidence: *i.e.*, whether by stating that it "does not negate [that] finding" or "rather, it tends to support that finding" (App. E, p. 25a). The legal error is that the remaining evidence was not evaluated on its own terms, but was accorded secondary status.

This error is particularly significant where the preferred evidence is clearly the least reliable evidence in the record, as the courts have consistently held when

faced with a company's promotional characterization of its own products. Thus, in *Reynolds Metals Co.* v. *FTC*, 309 F. 2d 223, 228 (1962), commenting on intra-company communications reflecting Reynolds' belief in the "specialty nature" of florist foil, Chief Justice Burger (then writing for the District of Columbia Circuit) opined:

> But these factors, standing alone, provide no reason for distinguishing florist foil from other decorative foil, all of which is aluminum foil; they are reminiscent of assertions in a complaint awaiting the proof of a hearing. Florist foil is not unique for purposes of Section 7 simply because someone in an unrelated context said it is a "specialty".

Similarly, in *United States* v. *Arnold, Schwinn & Co.*, 388 U.S. 365, 381 n. 7 (1967), this Court refused to find that Schwinn's claims of product excellence established a lack of substitutability with other functionally interchangeable bicycles. Likewise, in *General Foods Corp.* v. *FTC*, 386 F. 2d 936, 942 (3rd Cir. 1967), the court rejected the contention—based on advertising claims—that synthetic products were functionally similar to steel wool pads, noting that "[a]dvertising puffs will not be considered by this Court as evidence of that which could not be proved below."

It is clear that the Commission's preferential treatment of the promotional claims affected the outcome of the proceeding below, even apart from the claims' inherent lack of probative value. The claims stressed certain properties of sintered metal friction materials, such as temperature or heat resistance, which the Commission seized upon to support a finding that

those materials had peculiar uses (App. E, p. 23a). In sharp contrast with the promotional claims, the other evidence of record—the testimony of producers, buyers and users of the materials—established that all friction materials are used interchangeably, and that buyers are not concerned with their composition—"[t]hey want friction characteristics and performance characteristics" (*e.g.*, J.A. 1079). Indeed, both the hearing examiner and the Commission found that friction materials are used interchangeably, and collectively compose a unitary market (see the Statement, *supra*, pp. 5-6).[12]

The Commission, however, refused to appraise the "degree of substitutability" between sintered metal and other friction materials because of its conclusion that a submarket definition could be based on promotional claims alone (see App. E, p. 32a). Had the Commission fairly weighed the evidence of interchangeability and considered the reasons for that interchangeability, as it should have done, it should also have reached a different result.[13]

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[12] The court of appeals' statement that "the record is singularly devoid of any testimony that indicates that any such competition [between sintered metal and other friction materials] exists as a practical matter" (App. B, p. 4a) is clearly erroneous in light of the hearing examiner's and Commission's findings summarized in the text. For record examples of instances of substitution between sintered metal friction materials and other friction materials, see J.A. 1320, 1378, 1380, 1470-76, 1639, 1659-60, 1672, 1776-77, 2181-83, 2258-59, 2268-69, 2431, 2448-53, 2456-57.

[13] Compare *Sandura Co.* v. *FTC*, 339 F.2d 847, 859-60 (6th Cir. 1964), where the court acknowledged that the evidence cited by the Commission "[s]tanding alone" might be sufficient to sustain its order, but ruled that in the context of the whole record the cited evidence was "inadequate." The court therefore set aside the order.

As an illustration, the Commission placed great reliance on the temperature or heat resistance of sintered metals touted in the promotional claims. But the other record evidence established that temperature resistance (like durability) is mainly a function of the friction material's backing plate—not the friction material itself (J.A. 355-56)—and since steel is commonly used as backing for both organic and sintered metal friction materials, their capacities for heat resistance do not greatly vary (see J.A. 1272, 1777-79, 2566-67). Consistent with that evidence, the most precise documentation of temperature resistance in the record states that sintered metal can function, with low but useful friction and high but tolerable wear rate, at "temperatures of 1,500 F." (CX 9, J.A. 2724), and that asbestos friction materials will "operate at ambient temperatures from 1,000 to 1,500 F." (CX 9, J.A. 2691). There also was evidence that paper has a greater heat absorption capacity than any sintered metals (J.A. 1285).

It should be emphasized, in conclusion, that we are not asking this Court to review the evidence and make findings contrary to those made by the agency. It is our position that the Court should rule as a matter of law that the Commission's compartmentalizing of the record prevented the agency from properly weighing that evidence which "fairly detract[ed]" (see *Eris Mfg. Co.* v. *FTC*, 287 F.2d 831, 847-48 (9th Cir.), *cert. denied*, 368 U.S. 824 (1961)), from the inferences gleaned out of the promotional claims considered alone. The legal standard of evidentiary review employed by the Commission, in short, attached undeserved significance to evidence of little reliability and imposed upon all other evidence the burden of negating

conclusions already drawn. Employment of that standard unlawfully prejudiced Brake Shoe's right to a fair opportunity to defend against the complaint allegations. The judgment of the court of appeals affirming the Commission's order should therefore be reversed.

CONCLUSION

The petition for a writ of certiorari should be granted.

Respectfully submitted.

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May 1970.

APPENDICES

APPENDIX A

Filed Jan. 8, 1970

No. 18,815

UNITED STATES COURT OF APPEALS
FOR THE SIXTH CIRCUIT

ORDER

ABEX CORPORATION, *Petitioner,*

vs.

FEDERAL TRADE COMMISSION, *Respondent.*

BEFORE: WEICK and EDWARDS, Circuit Judges and BROOKS, District Judge.

On petition for review of an order of the Federal Trade Commission,

This cause came on to be heard on the transcript of the record from the Federal Trade Commission, and was argued by counsel.

On consideration whereof, it is now here ordered, adjudged and decreed by this Court that the order of the Federal Trade Commission be and it is hereby affirmed as modified.

It is further ordered that Respondent recover from Petitioner the costs on appeal as itemized below.

Entered by order of the Court.

/s/ CARL W. REUSS
Clerk

Costs: None

APPENDIX B

UNITED STATES COURT OF APPEALS
FOR THE SIXTH CIRCUIT

No. 18815

ABEX CORPORATION, *Petitioner*,

v.

FEDERAL TRADE COMMISSION, *Respondent*.

PETITION to Review an Order of the Federal Trade Commission.

Decided January 8, 1970.

Before: WEICK and EDWARDS, Circuit Judges, and BROOKS,* District Judge.

EDWARDS, Circuit Judge. Petitioner Abex Corporation seeks this court's vacation of a divestiture order and the dismissal of a complaint filed before the Federal Trade Commission (FTC). The complaint alleged that Abex had violated the antimonopoly provisions of Section 7 of the amended Clayton Act, 15 U.S.C. § 18 (1964), by acquisition of the S. K. Wellman Company. The FTC, after hearings, held that the acquisition was unlawful and entered a divestiture order and an injunction against future acquisitions of the same nature.

Petitioner presents three claims: 1) the FTC order defining a "submarket" of sintered metal friction materials is not supported by substantial evidence; 2) The FTC order in finding anticompetitive effect of the acquisition is not supported by substantial evidence. 3) The injunction entered by the FTC is over broad.

Abex Corporation is the successor name to American Brake Shoe Company. On April 16, 1963, American Brake Shoe, a large conglomerate which manufactures railroad

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* Honorable Henry L. Brooks, Chief United States District Judge for the Western District of Kentucky, sitting by designation.

products, hydraulics, castings and friction materials merged with the S. K. Wellman Company. Wellman at the time manufactured only one line of products; these were sintered metal friction materials for clutches, brakes and transmissions for heavy duty equipment and machinery. Wellman's principal customers had been aircraft companies, mining companies and the like.

Prior to the merger, American Brake Shoe sought Commission approval for its purchase of Wellman. After 13 months, American Brake Shoe proceeded with the merger without receiving such approval.

At the hearing before the FTC Examiner, Abex insisted and offered evidence tending to prove that sintered friction materials were only a small part of a large competitive field which included both "organic" friction materials (asbestos brakes, etc.) and metal friction materials. The Trial Examiner made findings of violation of Section 7 of the Clayton Act by Abex's acquisition of Wellman on two different bases—first, assuming that all friction materials constituted the overall market (or "universe") and second, assuming that sintered metal friction materials constituted a valid submarket. The FTC specifically held that sintered friction materials constituted a valid submarket and declined to consider the wider "universe" for which Abex argued. The FTC affirmed the findings of the Examiner as to the anticompetitive effect of the acquisition and ordered divestiture and a 10-year injunction against similar acquisitions.

Both the Examiner and the Commission cited and relied on an analysis of the sintered metal friction material market which tended to show that Abex, by its acquisition of Wellman, moved from third to a dominant first place in the market.

The Commission opinion on this score said:

> "[I]t is obvious that the elimination of Wellman as a substantial competitor from the already limited

number of producers necessarily leads to the results proscribed by the statute. The margin of error, if any, residing in the market share percentages computed from the survey is therefore of little significance. Our examination of the record accordingly constrains us to affirm the finding of the examiner that the effect of the merger may be to substantially lessen competition in the production and sale of sintered metal friction materials."

As to the first appellate issue concerning whether sintered metal friction materials were a valid submarket, Abex appears to us to rely more upon theory than upon economic realities. In essence, it asserts that any clutch or braking device which currently uses sintered metal friction could be so designed as to supplant sintered metal friction by organic or other metal friction. But the record is singularly devoid of any testimony that indicates that any such competition exists as a practical matter.

There is evidence from which the FTC could have concluded that sintered metal friction devices are up to 40% more expensive than organic and hence are used in specialty applications which through heavy use wear out organic friction devices too quickly.

In its 1960 annual report petitioner said:

"For severe applications, American Brakeblok manufactures friction parts of sintered metals: powdered metals which are molded under pressure and then fused under heat. These materials handle power transmission on heavy construction equipment and braking on jet aircraft such as the Boeing 707 and Douglas DC-8. They are also used in some automotive transmissions where special heat-resistant characteristics are required."

Petitioner's 1958 annual report had been even more specific about the special quality of sintered metal:

> "Traditional friction materials cannot stand up under the heat and pressure generated in the brakes of jet aircraft or in the transmission of heavy-duty earth-moving equipment. Technological know-how enables Brake Shoe to create parts like these clutch discs out of powdered metals, which are shaped under pressure and then sintered until they fuse."

Petitioner's 1961 annual report provides this comparison between the functions of organic and sintered metal friction materials:

> "Through its American Brakeblok Division, the company is a major producer of both organic and metallic friction materials. Our principal products are brake lining for cars, trucks and buses. These are made of asbestos and other materials bonded under heat and pressure with an organic resin.
>
> "A fully loaded jet airliner such as the Boeing 707 weighs about 270,000 pounds and lands at speeds as high as 138 miles per hour. Ordinary materials would melt under the terrific heat generated by its brakes, so American Brakeblok makes jet plane braking materials out of sintered metals. This type of material is first formed out of powdered metals into near-finished shape, and is then fused solid under heat and pressure.
>
> "Sintered materials also have the heat and wear resistance needed to stand up under grueling use in crawler tractors and heavy earthmoving equipment. American Brakeblok provides clutch and brake parts of sintered metals for construction equipment and other types of industrial machinery."

The record also contains detailed expert testimony concerning the functional and economic differences between sintered metal friction materials and organic friction materials, as well as similarly detailed testimony concerning the differences in methodology and plant equipment required to produce them.

Seven indicia of a valid submarket are set forth in *Brown Shoe Co.* v. *United States*, 370 U.S. 294 (1962):

> "The outer boundaries of a product market are determined by the reasonable interchangeability of use or the cross-elasticity of demand between the product itself and substitutes for it.[42] However, within this broad market, well-defined submarkets may exist which, in themselves, constitute product markets for antitrust purposes. *United States* v. *E. I. du Pont de Nemours & Co.*, 353 U.S. 586, 593-595. The boundaries of such a submarket may be determined by examining such practical indicia as industry or public recognition of the submarket as a separate economic entity, the product's peculiar characteristics and uses, unique production facilities, distinct customers, distinct prices, sensitivity to price changes, and specialized vendors.[43] Because § 7 of the Clayton Act prohibits any merger which may substantially lessen competition 'in *any* line of commerce' (emphasis supplied),

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"[42] The cross-elasticity of production facilities may also be an important factor in defining a product market within which a vertical merger is to be viewed. Cf. United States v. Columbia Steel Co., 334 U.S. 495, 510-511; United States v. Bethlehem Steel Corp., 168 F.Supp. 576, 592 (D.C.S.D. N.Y.). However, the District Court made but limited findings concerning the feasibility of interchanging equipment in the manufacture of non-rubber footwear. At the same time, the record supports the court's conclusion that individual plants generally produced shoes in only one of the product lines the court found relevant.

"[43] See generally Bock, Mergers and Markets, An Economic Analysis of Case Law 25-35 (1960).

it is necessary to examine the effects of a merger in each such economically significant submarket to determine if there is a reasonable probability that the merger will substantially lessen competition. If such a probability is found to exist, the merger is proscribed.[44]

Brown Shoe Co. v. *United States*, *supra* at 325-26.

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[44] *United States* v. *E. I. du Pont de Nemours & Co.*, 353 U.S. 586, 592, 595; *A. G. Spalding & Bros.* v. *Federal Trade Comm'n*, 301 F.2d 585, 603 (C.A. 3rd Cir.); *American Crystal Sugar Co.* v. *Cuban-American Sugar Co.*, 259 F.2d 524, 527 (C.A. 2d Cir.); *United States* v. *Bethlehem Steel Corp.*, 168 F. Supp. 576, 603 (D.C.S.D.N.Y.). See also note 39, *supra*."

It seems clear to us that there is more than substantial evidence to support at least these indicia of a separate submarket. 1) As we have noted, sintered metal friction materials are substantially higher in price than organic friction materials. 2) They clearly have peculiar characteristics and uses as has been pointed out in the exhibits quoted above. 3) They require an entirely different technology and separate production facilities.

Similar indicia were employed by Judge (now Chief Justice) Burger, writing for the D. C. Court of Appeals in *Reynolds Metals Co.* v. *FTC*, 309 F.2d 223, 226-29 (D.C. Cir. 1962). He held that aluminum florist foil was a distinct market from decorative aluminum foil because of distinct customers, uses and prices.

We hold that there is substantial evidence on the whole record to support the FTC finding that sintered metal friction materials constituted a valid submarket.

The second issue was whether the FTC's findings of anticompetitive effects was supported by substantial evidence. An FTC chart presented in evidence at the hearing and subsequently considered by the Commission, shows the percentage results of the Abex acquisition. The chart

shows Abex (American Brake Shoe) absorbed its principal competition and took a dominant position in the submarket. Although appellant attacks this chart as not including all relevant competition, we find in the testimony of industry figures as to market competitors both substantial and highly persuasive testimony as to its inclusiveness.

Total Shipments and Market Shares of Companies Manufacturing (1962)

Company	Total Shipments
American Brake Shoe Co.	$ 3,517,440
S. K. Wellman Co.	11,187,086
Sub-total, 2 companies	$14,704,526
Raybestos-Manhattan, Inc.	5,306,078
The Bendix Corp.	1,880,990
General Metals Powder Co.	1,916,921
General Motors Corp.	450,662
Friction Products Corp.	7,750
Chrysler Corp.	1,243
R. G. LeTourneau & Co.	90,000
Total	$24,358,170
American Brake Shoe Co.	14.4%
S. K. Wellman Co.	45.9
Sub-total, 2 companies	60.4%
Raybestos-Manhattan, Inc.	21.8
The Bendix Corp.	7.7
General Metals Powder Co.	7.9
General Motors Corp.	1.9
Friction Products Corp.	—
Chrysler Corp.	—
R. G. LeTourneau & Co.	0.4
Total	100.1%

Thus, based on 1962 figures, Abex (the third largest manufacturer) merged with Wellman (the largest) so as to acquire 60% of the sintered metal friction market.[1]

In *United States* v. *Philadelphia Nat'l Bank*, 374 U.S. 321 (1963), the Supreme Court said:

> "Specifically, we think that a merger which produces a firm controlling an undue percentage share of the relevant market, and results in a significant increase in the concentration of firms in that market, is so inherently likely to lessen competition substantially that it must be enjoined in the absence of evidence clearly showing that the merger is not likely to have such anticompetitive effects. *See United States* v. *Koppers Co.*, 202 F. Supp. 437 (D.C.W.D. Pa. 1962)." *United States* v. *Philadelphia Nat'l Bank*, *supra*, at 363.

In terms of "undue percentage share" of a market, the Supreme Court has upheld anticompetitive findings upon much lower percentages than in our instant case. *United States* v. *Von's Grocery Co.*, 384 U.S. 270 (1966); *United States* v. *Philadelphia Nat'l Bank*, *supra*. As to this issue also, we affirm.

The third issue concerns whether the FTC had the power to prohibit Abex from acquiring any other company which manufactured or sold sintered metal friction materials for ten years without prior approval by the FTC.

Section 11 (b) of the Clayton Act provides:

> "If . . . the Commission . . . shall be of the opinion that any of the provisions of [sections 2, 3, 7, and 8 of the Clayton Act] have been or are being violated, it shall . . . issue . . . an order requiring such

[1] The FTC chart also indicates that Abex and Wellman together controlled slightly greater percentages of the submarket in 1960 and 1961.

person to cease and desist from such violations, and divest itself of the stock, or other share capital, or assets, held or rid itself of the directors chosen contrary to the provisions of sections [7 and 8] of this [Act] . . . ." 15 U.S.C. § 21(b) (1964).

We read the statute as authority for the remedy chosen by the Commission. *Ekco Products Co.*, [1963-1965 Transfer Binder] Trade Reg. Rep. ¶ 16,879 (FTC 1964), *aff'd*, 347 F.2d 745 (7th Cir. 1965). *See also FTC* v. *Beatrice Foods Co.*, 384 U.S. 597 (1966); *American Cyanamid Co.* v. *FTC*, 363 F.2d 757, 771-72 (6th Cir. 1966).

We do find overbreadth in the words "or sale of" contained in the final paragraph of the order. The submarket as defined by this record really concerned companies which manufactured sintered metal friction materials. The words "or sale of" are stricken from the order as otherwise approved.

As modified above, the order of the Federal Trade Commission is affirmed.

APPENDIX C

(Filed February 3, 1970)

UNITED STATES COURT OF APPEALS
FOR THE SIXTH CIRCUIT

No. 18,815

ABEX CORPORATION, *Petitioner*,

v.

FEDERAL TRADE COMMISSION, *Respondent*.

Order

Before: WEICK, EDWARDS and BROOKS, Circuit Judges.

On consideration of the petition for rehearing filed in the above-styled case, the same is hereby denied.

Entered by order of the Court

/s/ CARL W. REUSS
Clerk

APPENDIX D

UNITED STATES OF AMERICA
BEFORE
FEDERAL TRADE COMMISSION

Commissioners:

Paul Rand Dixon, Chairman
Philip Elman
Everette MacIntyre
Mary Gardiner Jones
James M. Nicholson

Docket No. 8622

In the Matter of American Brake Shoe Company, a corporation.

FINAL ORDER

The Commission has determined, for the reasons stated in the accompanying opinion, that respondent's appeal, except to the extent noted, should be denied and that the hearing examiner's initial decision and order as modified and supplemented by the accompanying opinion should be adopted as the decision of the Commission. Accordingly,

IT IS ORDERED that the order contained in the initial decision be, and it hereby is, modified to read as follows:

ORDER

IT IS ORDERED that respondent, American Brake Shoe Company (now known as Abex Corporation), shall, within six months from the date of service upon it of this order, divest itself absolutely and in good faith to a purchaser or purchasers approved by the Federal Trade Commission, of all stock and of all

right, title and interest in all assets, properties, rights and privileges, acquired by respondent as a result of its acquisition of the stock and assets of The S. K. Wellman Company, so as to restore that which formerly made up the Wellman Company as a viable competitive entity in the friction materials and sintered metal friction materials industries in the United States.

It Is Further Ordered that respondent shall not sell or transfer the aforesaid stock or assets, directly or indirectly, to anyone who at the time of divestiture is a stockholder, officer, director, employee, or agent of or otherwise directly or indirectly connected with or under the control or influence of respondent.

It Is Further Ordered that pending divestiture, respondent shall not make any changes nor permit any deterioration in any of the plants, machinery, buildings, equipment or other property or assets of the former Wellman Company which may impair present rated capacity or their market value, unless such capacity or value is restored prior to divestiture.

It Is Further Ordered that for a period of ten (10) years from the date of issuance of this order, respondent shall cease and desist from acquiring, directly or indirectly, through subsidiaries or otherwise, without the prior approval of the Federal Trade Commission, the whole or any part of the stock, share capital, or assets of any corporation engaged in commerce and in the production or sale of sintered metal friction material.

It Is Further Ordered that the hearing examiner's initial decision, as modified and supplemented by the findings and conclusions embodied in the accompanying

opinion, be, and it hereby is, adopted as the decision of the Commission.

It Is Further Ordered that respondent shall, within sixty (60) days after service upon it of this order, file with the Commission a report in writing, setting forth in detail the manner and form in which it has complied with the provisions in the order set forth herein.

By the Commission. Commissioner Nicholson did not participate for the reason oral argument was heard prior to his appointment to the Commission.

/s/ Joseph W. Shea
Joseph W. Shea,
Secretary.

[seal]
Issued: April 10, 1968

APPENDIX E

UNITED STATES OF AMERICA

BEFORE

FEDERAL TRADE COMMISSION

COMMISSIONERS:

Paul Rand Dixon, Chairman
Philip Elman
Everette MacIntyre
Mary Gardiner Jones
James M. Nicholson

Docket No. 8622

In the Matter of

AMERICAN BRAKE SHOE COMPANY, a corporation.

Opinion of the Commission

By Commissioner MacIntyre:

I

This proceeding involves the merger on April 16, 1963, of the American Brake Shoe Company (Brake Shoe), a large diversified company engaged in the manufacture of railroad products, hydraulic products, castings, and friction materials with the S. K. Wellman Company (Wellman), a single line company engaged primarily in the production of friction materials. The acquisition was challenged under § 7 of the Clayton Act by the Commission's complaint of May 12, 1964. The proceeding is now on appeal before the Commission from the hearing examiner's initial decision sustaining the allegations of the complaint.

Brake Shoe challenges the examiner's decision principally on the ground that he failed to correctly define the

relevant product market and that his conclusions as to the merger's anticompetitive effect are not supported by substantial evidence. Respondent in addition contends that the examiner violated due process by failing to make findings on material issues raised by Brake Shoe and that the order's prohibition against further acquisitions of friction material producers or sellers for a period of ten years is beyond the Commission's power to prescribe relief. In addition, Brake Shoe objects that critical findings which the examiner did make were superficial and that the rationale of the initial decision as a whole is unclear.

The threshold question facing the Commission on appeal is whether the examiner has correctly delineated the relevant product markets. That determination is of course "a necessary predicate to a finding of a violation of the Clayton Act because the threatened monopoly must be one which will substantially lessen competition 'within the effective area of competition' ".[1] There is no dispute on the relevant geographic market which both sides agree is the United States as a whole.

The product involved in this proceeding is friction material whose function it is to transmit, convert or retard the energy of motion in automotive or industrial brake and clutch assemblies or transmissions as brake blocks or linings, clutch disks and transmission parts. The complaint alleges in this connection that the term "friction material" includes but is not limited to organic friction material, sintered metal friction materials and paper friction materials.

According to the complaint:

> Organic friction materials are those made from asbestos and other materials bonded under heat and pressure with an organic resin.

[1] *United States* v. *E. I. du Pont de Nemours and Co.*, 353 U.S. 586, 592 (1957).

Paper friction materials are those produced by rolling a pulp made from a blend of ingredients into a material resembling heavy cardboard.

Sintered metal friction materials are those produced by blending various metallic and non-metallic powders. The ingredients are then compressed and sintered to a steel or other backing under high pressure and temperature.

The complaint alleges that the relevant product markets for this proceeding are the production, distribution and sale of friction materials in general and sintered metal friction materials in particular, exclusive of friction materials used by the railroad industry. Respondent on appeal challenges the examiner's finding that the broad market of friction materials encompasses "organic friction materials made from asbestos or other materials, homogeneous metal materials and sintered metal friction materials. On this issue, respondent asserts that the finding that there is a commercially significant all friction materials market is invalid because there is "pervasive interchangeability" between all friction materials and functionally equivalent non-friction systems and devices such as various hydraulic or other energy conversion systems. Brake Shoe also asserts that the examiner erred in finding that sintered metal friction materials are a significant submarket wherein the effects of the acquisition may be evaluated for the purposes of the merger act. Further, respondent assails the examiner's finding as to the competitive effects of the acquisition in both markets on the ground that they lack sufficient evidentiary foundation and clarity.

It may be noted at the outset, that the Commission has determined to confine its evaluation of the competitive impact of the merger to the sintered metal friction materials submarket. The validity of the market share statistics relating to friction materials generally is subject to some

doubt. Respondent had previously submitted these figures, presumably in good faith, as justification of its request for pre-merger clearance, but in the course of the hearings presented expert testimony attacking the statistical assumptions underlying the study. This testimony went unrebutted and the examiner stated that he was "placing no reliance on the accuracy of the estimated universe and the estimated sales figures of the various companies" contained in Commission Exhibit 65.[2] Under the circumstances, the Commission will disregard these statistics and evaluate the competitive consequences of the acquisition solely in terms of sintered metal friction materials which in any event was the area of direct competition between Wellman and Brake Shoe. The Commission's reasons for adopting, with some modification, the hearing examiner's findings on the merger and its competitive impact on the sintered metal submarket are noted below.

II

Brake Shoe through its American Brakeblok Division, is a major producer of both organic and sintered metallic friction materials sold both to vehicle manufacturers and the replacement market. Brake Shoe's organic friction materials for automotive and industrial use are produced in its Winchester, Virginia, plant. The respondent's sintered metal materials for automotive and industrial equipment[3] are produced in Brake Shoe's Cleveland, Ohio, plant and since the acquisition in Wellman's plant located in Bedford, Ohio. Wellman with a much narrower product line than Brake Shoe concentrated principally on the manufacture of sintered metal friction materials in its

[2] Initial Decision p. 44.

[3] Industrial equipment includes power shovels, hoists, graders, power take-off units, farm tractors and machinery. American Brakeblok Catalog, *Friction Materials For Industrial Equipment*, CX 17, p. 1.

Bedford, Ohio, plant. The examiner's finding that Wellman was a well-managed, financially successful and growing company with competent sales, engineering and research talent is not disputed.

The following sales figures set forth in the initial decision serve to outline the relative size of the two companies and their competitive relationship. Prior to the merger in 1962, Brake Shoe's total shipments for all products were approximately $194,892,000. In 1963, the year of the acquisition, total shipments for all products rose to $214,669,000. Respondent's overall sales of friction materials in 1963, totalled some $31,500,000 compared to $17,700,000 in 1962, the pre-acquisition year. Wellman's net sales in 1962, comprised primarily of sintered metal friction materials, totaled approximately $12,421,240. In 1961, the examiner's findings show that Brake Shoe's sales from the Cleveland plant which accounted for respondent's production of sintered metal friction materials totalled some $2,743,000. The examiner's findings in the case of both companies show that an important percentage of their sales of friction materials were concentrated among a limited number of customers engaged in original equipment manufacturing in the automotive or industrial fields.

III

The initial question to be answered on this appeal is whether the examiner correctly found that sintered metal friction materials are a valid submarket for the purposes of § 7, since complaint counsel's case in chief focused largely on the sintered metal submarket where Brake Shoe and Wellman were in direct competition in the period preceding the acquisition.

Essentially, the examiner found that sintered metal friction materials have peculiar uses and characteristics, since they differ from organic and paper friction materials in heat and wear resistance and they have greater strength

because of the steel carrying core to which they are attached. He further found the sintered metal friction materials are distinguished from other friction materials by a unique technology and the fact that sintered metal friction materials in general command significantly higher prices than other friction materials.

Respondent attacks the examiner's findings on the sintered metal friction materials submarket as erroneous on the ground that he ignored evidence demonstrating the "pervasive interchangeability" between sintered metal and other friction materials on the one hand and between all friction materials and functionally equivalent devices on the other. The respondent also asserts that the examiner made incomplete findings to justify his exclusion of homogeneous metal friction materials from the submarket. The examiner's findings upon the unique technology of sintered metal friction materials the respondent would dismiss as irrelevant on the ground that there is no allegation that suppliers of production equipment had been injured by the merger. In addition, respondent alleges that the technology of producing sintered metal friction materials does not serve to distinguish the products as a valid submarket on the ground that various sintered metal friction materials differ from each other in the production process. Brake Shoe claims in this connection that there is no universal production technique for sintered metal friction materials. Respondent also challenges the finding of the examiner that price differentials differentiate sintered metal friction materials on the ground that the evidence as to interchangeability vitiates his finding on that score. Brake Shoe asserts that the examiner's industry recognition finding to support the lines of commerce set forth in the initial decision are erroneous for the reason that buyers recognize functionally equivalent products. Evidently the main thrust of respondent's attack on the initial decision's line of commerce findings is based on the contention that interchangeability precludes a valid submarket in sintered

metal friction materials. In view of respondent's claim that interchangeability bars a finding that sintered metal friction materials comprise a commercially significant submarket and respondent's further assertion that the examiner has overlooked important evidence bearing on these issues, the Commission has carefully reviewed the record on this point.

The evidence demonstrates that sintered metal friction materials possess unique performance characteristics differentiating them from other friction materials. These are described in the promotional literature and catalogs of Brake Shoe and Wellman published prior to the inception of this proceeding. Relevant to the question of whether sintered metal friction parts possess performance characteristics setting them apart from other products is Brake Shoe's statement that because of the numerous types and designs of industrial equipment "the friction materials employed must meet a wide range of operating conditions. No single material will adequately meet all needs", and the further statement that "Brakeblok's industrial friction materials [are] each specifically designed and engineered to insure the proper friction for the particular equipment under consideration".[4] In the same catalog, Brake Shoe states "American Brakeblok sintered metal friction materials . . . are intended to supplement organic friction materials but not to replace them. Under severe operating conditions, metallic facings assure longer life."[5]

Brake Shoe in another brochure "Taming Dynamics with Engineered Friction"[6] notes that "Higher speeds, increasing horsepower, heavier loading for vehicles and machines are creating higher operating temperatures and

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[4] CX 17, American Brakeblok Catalog, *Friction Materials for Industrial Equipment*, p. 1.

[5] *Id.* at 2.

[6] CX 9, pp. 149, 151.

associated design problem for friction materials". While this statement is applicable to friction materials generally, the stress on ability to withstand high temperatures is significant. It is a feature of sintered metal friction materials to which extensive attention has been devoted in the record, since it has a strong bearing on the life and utility of friction products.

The record shows that Wellman and Brake Shoe in their promotional literature have consistently represented that sintered metals have superior qualities of heat resistance, moisture resistance, and longer life than other materials as well as superior efficacy. In Wellman's own words:

> VELVETOUCH LASTS LONGER . . .
> BECAUSE IT IS ALL-METAL
>
> Unlike ordinary asbestos or semi-metallic friction products, genuine Velvetouch is made from powdered metals formed under tremendous pressures and fused with a solid steel backing. No organic substances or binders of any kind are used. As a result, Velvetouch will not rot in oil . . . . or burn like conventional material, and is not affected by moisture. Users the world over, who demand the utmost dependability in clutch and brake performance, rely on genuine Velvetouch for—
>
> EXTRA SERVICE LIFE. All-Metal construction carries heat from friction surface, runs cooler, lasts longer.
>
> * * * *
>
> UNIFORM ACTION. Friction efficiency is constant month after month . . . because metal does not deteriorate like conventional materials.
>
> * * * *
>
> LOW COST. Measured in added service and work performed, All-Metal construction costs less than ordinary friction material.[7]

[7] CX 20, p. 2.

Brake Shoe's annual reports similarly stressed the unique suitability of sintered metals for high energy heavy-duty uses. For example, respondent's annual report for 1961, states:

> "A fully-loaded jet airliner such as the Boeing 707 weighs about 250,000 pounds and lands at speeds as high as 138 miles per hour. Ordinary materials would melt under the terrific heat generated by its brakes, so American Brakeblok makes jet plane braking materials out of sintered metals. This type of material is first formed out of powdered metals into near-finished shape, and is then fused solid under heat and pressure.
>
> "Sintered materials also have the heat and wear resistance needed to stand up under grueling use in crawler tractors and heavy earthmoving equipment. . . ."[8]

The consistent promotional claims of Brake Shoe and Wellman support the conclusion that sintered metal friction materials have commercially significant performance characteristics, including longer life and heat resistance, distinguishing them from other friction materials. The question remains whether the testimony and other evidence adduced in this proceeding vitiates the finding on this point which Brake Shoe's and Wellman's promotional claims considered alone would justify.

The testimony of experts in the field of powder metallurgy and in the production of sintered metal friction materials further supports the finding that sintered metal friction materials possess peculiar characteristics and uses. According to Dr. Benjamin Tolbert Collins, Director of Research and Product Development of the Wabash Division of Raybestos-Manhattan, Inc., "If the energy level is

[8] CX 6, p. 13.

high enough only sintered metals will work."[9] Fritz V. Lenel, a professor of metallurgical engineering at the Rensselaer Polytechnic Institute at Troy, New York, a witness of respondent, testified that the sintered metal friction materials manufactured by Wellman were more advantageous than organic asbestos based material since they are capable of absorbing higher energies for a given volume of size.[10] Similarly, Raymond Moalli, the Chief Sales Engineer of Raybestos-Manhattan, testified that his company represents to customers that sintered metals are superior to organic materials under extremely high temperatures and because they are unaffected by oil. This, he stated, eliminates normal causes of failure under heavy-duty conditions and lessens the need for costly maintenance. The record shows, therefore, that the three largest producers of sintered metal friction materials sell this product on the basis of representations that it has superior performance characteristics, including the ability to op

[9] Tr. 895. Respondent on appeal also contends that the hearing examiner failed to resolve the credibility issue allegedly raised as to Dr. Collins by the testimony of his former superior at Wellman, with respect to the latter's conflict with Dr. Collins. We have reviewed this testimony and determined the examiner made no error in failing to make specific findings on this point, since on its face the testimony in question did not raise a credibility issue. Whatever the reason for Dr. Collins's departure from Wellman there is no indication that he would for that reason testify untruthfully in this proceeding. As a matter of fact, the witness upon whom respondent relies principally on this issue testified in response to the examiner's question that he would not disbelieve Dr. Collins's testimony under oath as to his professional qualifications (Tr. 3466). Another of respondent's witnesses, Kempton H. Roll, Executive Director of the Metal Powder Industries Federation, stated he would give respect to Dr. Collins's professional opinion (Tr. 3153).

[10] Tr. 3550. At another point, the witness stated, "There are definite disadvantages in the conventional materials containing organic materials and these disadvantages can be overcome by material made by the powder metallurgy method" (Tr. 3522).

erate under higher temperatures. This witness did state that in the case of Raybestos, lower cost items were making inroads on sintered metal friction materials, but significantly explained that the most important factors in this trend were design changes in brake or clutch systems, compensating for the different performance characteristics of the products by permitting cooler operation and therefore acceptance of a lower-cost material (Tr. 2986, 2987).

Brake Shoe, in the course of its defense, presented considerable testimony from manufacturers employing friction materials in an effort to substantiate its position that there is "pervasive interchangeability" between the sintered metal products and other friction materials. That testimony, taken as a whole, however, does not negate the finding compelled by the promotional claims of Brake Shoe, Wellman and Raybestos that sintered metals have unique characteristics distinguishing them in a commercially significant way from other friction products; rather, it tends to support that finding.

Edward C. Yokel, Chief Engineer of the Racine Works of the Twin Disc Clutch Company, a manufacturer of industrial clutches and marine gears, was called by Brake Shoe to testify with respect to the interchangeability of various friction materials. He stated that certain clutch plates whether made of sintered metal or of molded asbestos were interchangeable in terms of dimension but there were some differences in function (Tr. 2036). He further testified that his company uses primarily molded asbestos in its heavy-duty industrial applications (Tr. 2063). This testimony as to the interchangeability factor, however, must be evaluated in the light of his assertion that different friction materials are only sometime interchangeable in terms of performance; at others they "are dimensionally interchangeable but not performance wise" (Tr. 2040).

His explanation, noted by the examiner, of why Twin Disc does not limit itself to either asbestos or sintered metal friction materials is revealing.

> "Each has its distinct advantage and in the case of the dry clutch, the molded asbestos is desired because of lower cost, equal or better wear resistance in most cases to the copper base sintered metal. It has in certain usage areas the peculiar property of giving off a foul odor when abused to warn the operator that he has gone too far in his use of it. Those are the primary advantages of the asbestos material".
>
> * * * * *
>
> "The sintered metals can operate at temperatures well above the temperatures of asbestos, because the material used to bind the asbestos as of today generally breakdown around six or seven hundred degree Fahrenheit. The water of hydration is driven out of asbestos. Water hydration is the way I know it. I may not have the very correct technical term. If [sic] breaks out of asbestos and it becomes a powder instead of a structure member at around 750 degrees Fahrenheit.
>
> "So the previously mentioned flash heats tend to destroy that skin surface of asbestos and thus erode, wear away those plates quite rapidly. Yet the sintered metals do not suffer such rapid damage at those elevated temperatures.
>
> "The strength of sintered metals quite often is another advantage in that the carrying core is steel, which could easily be 30,000 psi tensile strength as compared to only 6,000 for asbestos. If the application can use such differences in strength it is an advantage." (Tr. 2071-2072).[11]

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[11] This witness also stated that the sintered metal friction material can withstand higher loads in heat better than the asbestos as a general rule (Tr. 2078).

The Executive Vice President of the Lee Norse Company, a manufacturer of mining equipment, similarly testified that brakes in its equipment utilized organic and sintered friction materials interchangeably. He stated that Lee Norse uses sintered metal friction materials only as an option (Tr. 2491-2493), explaining that customers who specify sintered metal brakes do so because:

> ". . . The customer does not like to adjust a wearing brake. So he buys the expensive sintered product to keep from adjusting its brake very often. It is strictly a function of maintenance of brakes. *He is willing to spend the money in a more expensive low-wearing material rather than adjust his brake more frequently.*", (emphasis supplied), (Tr. 2494, 2495-2496).

James H. Bornzin, Assistant Manager of Engineering of the International Harvester Company, Farm Equipment, Research and Engineering Center, also called as a witness by respondent, testified along similar lines. He stated that sintered metals have not preempted the farm equipment field even in heavy-duty applications. He further testified, however, that in the agricultural equipment field sintered metal friction materials and organic materials are not directly interchangeable in every application, and that this is taken into account at the design stage (Tr. 2784-85). This testimony furnishes additional support for the finding that sintered metals and other friction materials are not "pervasively interchangeable" as respondent contends. Mr. Bornzin testified that International Harvester utilizes organic friction materials in combines operated in the same horsepower range as tractors using sintered metal materials.[12] Harvester's reasons for using

[12] In the case of a tractor where design restrictions were limited, Harvester used sintered material in the clutch rather than organic because "we had to get a material which had a higher coefficient of friction and more durability" (Tr. 2799).

organic materials and sintered metal materials in the one application and not in the other are enlightening:

> "The combine is not used in the same way as a tractor is. A tractor is a draft instrument which requires high or almost full torque loading under the operating conditions, whereas a combine is not used at full peak capacity at all times. In my opinion the demand on the clutch on the combine are [sic] not as high as that on a tractor, but in addition we split our drive on the combine and it is very rarely that all the horsepower will go through the one drive whereas in a tractor it will all go through one drive." (Tr. 2800).

Another of respondent's witnesses, whose testimony is pertinent to the interchangeability issue, was John McCarthy, Chief Engineer of Research and Development with Gar-Wood Industries, a manufacturer of various types of equipment including truck winches and an aircraft tow tractor. According to this witness, the spot brakes on Gar-Wood's aircraft tow tractor are made of sintered metals because organic material would become saturated with oil and tend to become highly glazed, thus reducing the coefficient of friction. Further, this application would be characterized by high temperatures because of the small area of the spot brake, and Gar-Wood felt that the sintered material "would stand higher temperatures better than the organic." Another consideration dictating the use of sintered metal friction materials in this application as opposed to other friction materials was that using sintered metal parts permitted Gar-Wood to use a smaller space than if it used organic materials (Tr. 2887-88).

Fred Baugniet, Jr., purchasing agent of the Manitowoc Engineering Company, Manitowoc, Wisconsin, a manufacturer of cranes, shovels and drag lines sold primarily to contractors, is another of respondent's witnesses, testifying on the interchangeability issue, who confirmed the superior durability of sintered metal friction materials

(Tr. 3751). According to the witness in the case of machinery manufactured by his firm sintered metal friction materials could be used interchangeably with organic materials in any or all of the clutch and brake applications discussed in his testimony. He testified further, however, that in case of swing clutches, Manitowoc offers the widest choice of friction material options since this is the most vulnerable part of the machine, and sintered metal is one of the half dozen options which may be chosen in this instance; the others are organic. If the customer does not specify a friction material for the swing clutch and Manitowoc knows the nature of his work "we would probably lean towards putting a sintered metal at least on one side of his clutch plate" because "He will get better life out of it and he will be a happier customer if his clutch doesn't wear out too quick". Although the sintered metal friction material would be more expensive, in Manitowoc's view, because of the longer service which could be expected from sintered metals the ultimate cost to the purchaser would probably be less (Tr. 3764, 3767-68).

The fact that the unique performance characteristics of sintered metals as distinguished from other friction materials have commercial significance, is also demonstrated by evidence in the record showing that substitution of one material for the other in many, although not all, instances requires modification of the design of the brake assembly or transmission in which the friction product is to be utilized, before one material can be replaced by the other.

For example, Emil J. Hlinsky, Manager of Mining Products, Development for the Goodman Division of the Westinghouse Air Brake Company, testified that in the case of mining machinery manufactured by his company there are no applications in which sintered metal friction materials are now being used in which other friction materials could not be substituted (Tr. 2314). In Goodman's case, however, the substitution of one friction material for another

pre-supposes changes in the design of the application such as the clutch which is to use the friction material[13] As a result, given a specific clutch the materials would not be interchangeable without design changes taking into consideration differing performance characteristics, such as the heat resistance of the particular friction material (Tr. 2328, 2330).

Paul G. Hykes, Assistant Engineer of the Budd Company's Automotive Division, who testified that the advantage of a brake designed for use with sintered metal friction materials is that it is possible to dissipate the same amount of heat as with a larger brake, further stated, that "it would be a very fortunate coincidence" if a brake designed for organic linings would work satisfactorily with sintered metal linings (Tr. 3601, 3615-16).

The Armstrong Cork Company which hopes to compete with its paper asbestos friction materials in the automobile transmission field cannot directly substitute its materials for sintered metal materials. In view of the design considerations, "you just can't make direct substitutions".[14]

If sintered metals are to be displaced by lower cost paper or organic friction materials, this must be accomplished by designs which will permit the substitute material to operate at a lower temperature. One technique which may be employed is switching from a dry application to a wet application utilizing oil, since the use of oil in an application may compensate for the sintered metal friction ma-

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[13] Tr. 2331. ". . . in a particular design of given dimensions, you can't lift sintered material out and put, say, organic in, because of the design considerations. But in any one clutch application, you could design a clutch that would take organic materials, a clutch that would take brass, or a clutch that could take sintered for the same use" (Tr. 2331).

[14] Testimony of R. L. Collister, Marketing Manager for Armstrong Cork Company (Tr. 1743-45).

terials' heat advantage.[15] Redesign, however, may involve considerable expense because of the necessity for retooling (Bornzin, Tr. 2786).

Brake Shoe also introduced evidence with respect to non-friction energy conversion devices to demonstrate that devices of this nature by lessening the demands on friction materials increase the likelihood that vehicle manufacturers would convert from the more expensive sintered metal friction materials to cheaper organic products. One device relied upon by respondent to illustrate this point is the engine brake of the Jacobs Manufacturing Company, a device designed to slow down vehicles by dissipating the energy from engines, the friction brake being utilized only to bring the vehicle to a complete stop.[16] Jacob's sales manager testified on this point that these devices averaging $400 did permit vehicle operators to use less expensive materials than sintered metals in the friction brake (Tr. 2111-12). Such evidence of "interchangeability", however, far from demonstrating that there are no significant differences between sintered metal and other friction materials, demonstrates to the contrary that sintered metals' performance characteristics setting them apart from other friction products are in fact commercially significant. Otherwise, the contention that it is worthwhile to install a non-friction device, costing $400, for, among other reasons, the purpose of facilitating the substitution of cheaper materials for sintered metals would be completely unrealistic.

To summarize, the evidence in this proceeding that under certain circumstances one friction material may be substituted for another does not vitiate the fact that because of superior heat resistance, durability, and other qualities

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[15] Raymond Moalli, Raybestos-Manhattan (Tr. 2987-88); Wellman Deposition (Tr. 4103).

[16] Statement of Brake Shoe's counsel (Tr. 2090).

that sintered metal friction materials possess peculiar uses and characteristics which are commercially significant. Whatever the degree of substitutability shown here the products are not so identical as to justify ignoring the differences between them plain on the face of this record.

Price differences between products may be "the single, most important practical factor of the business" in determining the relevant market.[17] The testimony as a whole shows that as a general rule sintered metals command a significantly higher price than other friction products. For example, the record shows that sintered metals sell at a premium over organic materials[18] and that both are more expensive than homogeneous steel friction materials.[19] These differences are substantial. Truck blocks made of Wellman's sintered metal friction materials, the former President of Brake Shoe's Wellman Division conceded, could have been 5 to 10% higher than the very "top grade" organic blocks and 30 to 40% higher than the "average" organic block (Tr. 644, 649). A salesman for a distributor of automotive parts corroborated the testimony of the Wellman official on this point stating that Wellman's Velvetouch blocks sell for approximately a 25% premium over organic brake blocks (Tr. 2221). Similarly, the purchasing agent of the Manitowoc Engineering Company testified with respect to price differences that it would be roughly two to three times more expensive in the case of a par-

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[17] See *United States v. Aluminum Co. of America*, 377 U.S. 271, 276 (1964).

[18] Jack D. Hinton, Vice President for Original Equipment Sales, American Brakeblok Division of Brake Shoe (Tr. 1541). In the words of Benno Bordiga of the Allomatic Manufacturing Company:

> "I would say that the paper based material is the cheapest, the organic or semiorganic is next, and then way, way above that is the sintered material." (Tr. 1136).

[19] Hugh S. Kays, Manager of Purchasing, Warner Electric Brake and Clutch Company (Tr. 2913-14).

ticular application to install sintered metal rather than organic friction materials (Tr. 3768).

Despite the price disadvantage under which sintered metals suffer in comparison to other friction materials, the available data evidences an increase in the sale of this product in the relevant period. The total shipments of the three largest producers rose from $16,673,832 to $20,010,604 in the period 1960-62, immediately preceding the acquisition, a substantial increase.[20] The record indicates that price will govern the selection of the friction material, provided the less expensive product meets all the specifications of the user.[21] The increase accordingly suggests that there are commercially significant differences distinguishing sintered metals from other friction materials. Were it otherwise, the sales of sintered metals should in view of their price disadvantage have declined.

On the basis of technology as well, sintered metal friction materials are differentiated from other friction products. Their manufacture unlike organic and homogeneous metal friction materials, is basically dependent on powder metallurgy which involves unique production problems.[22] Brake Shoe's description of the blending process for sintered metal friction materials indicates a recognition of this fact by respondent:

> "Making sintered metal friction materials is very much like the work of the pharmacist at the corner

[20] CX 10 a, b, CX 10(b), 11, CX 90(d).

[21] E.g., testimony of John McCarthy (Tr. 2897).

[22] ". . . At about the same time that molded organic lining appeared, advances were being made in powder metallurgy, employing techniques that necessitated an extended development period. . . ." (Howard B. Huntress, Manager, Sintermet Products Development, American Brake Shoe Company, "Friction Elements in the design of Brakes & Clutches"; CX 9, p. 124).

drugstore. Sintered metals are compounded of fine powders in delicate proportions and exact weights . . .

". . . Each metal powder is there for a purpose and how it behaves on the job is influenced by every other ingredient in the formula."[23]

Similarly, Wellman's description of itself as the "pioneer of every major improvement in the highly specialized field of metallic friction materials" (CX 20, p. 271) also furnishes support for the finding that the technology of sintered metal friction materials is significantly different from the manufacturing process involved in other friction products. As an expert in the field of powder metallurgy testified there is "art" as well as science involved in the powder metal technology of sintered metal friction materials, since it is based on empirical know-how as well as on scientific principles[24]

Industry recognition of the fact that sintered metal friction material production involves a specialized technology is evidenced by the fact that a section of the Committee on Metal Powders and Metal Powder Products of the American Society for Testing and Materials was constituted specifically to study problems involved in sintered metal friction materials. A principal function of this section was to establish standard methods of testing for sintered metal friction materials, and the record shows that the section approved three standard tests adopted by

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[23] *Metal Trends*, 1957, CX 59b.

[24] Fritz V. Lenel (Tr. 3537-38); John Francis Lowey, President of Friction Products Company, testified:

> Q. Would you say that the formulation of powdered metal compositions is a trial and error art or an exact science?
>
> A. I would say today it is, and this would be emphatic it is an art (Tr. 798).

the parent committee of the American Society for Testing Materials.[25]

The testimony in this proceeding demonstrates that the production processes for sintered metal friction materials and other friction products are not interchangeable. For example, the sintered metal friction materials manufactured by Wellman could not be manufactured at Brake Shoe's plant making organic friction materials.[26] Similarly, Bendix produced sintered metal friction materials in areas separate from that used for the production of organic materials and utilized different personnel in this process[27] and the Carlisle Corporation, a manufacturer of an organic brakelining, has determined not to go into the manufacture of sintered metal friction materials because "it is an entirely different concept of manufacture as far as the organic brakelining that we are in."[28]

The respondent objects that the hearing examiner failed to make adequate findings on the question of whether homogeneous metals should be included in the line of commerce and that he ignored evidence demonstrating their interchangeability with other friction materials. The argument is rejected for the reasons already outlined as supporting the examiner's finding on the applicable product market. The record indicates that like organic friction materials, homogeneous metal friction materials may in certain applications be substituted for the sintered metal

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[25] CX 112; "Standard Method of Test for Hardness of Sintered Metal Friction Materials" (CX 113) adopted 1964; "Standard Method of Test for Density of Sintered Metal Friction Materials", adopted 1965 (CX 114); and "Standard Method of Test for Transverse Rupture Strength of Sintered Metal Friction Materials", also adopted in 1965 (CX 115).

[26] Testimony of Maynard Terry, (Tr. 524).

[27] Testimony of Edward W. Drislane (Tr. 779).

[28] Testimony of William J. Vachout, Vice President and General Manager, Carlisle Corporation (Tr. 1321).

product. The evidence however further demonstrates sufficient differences between these materials on the basis of their characteristics, technology and prevailing price levels to support the finding that the production and distribution of sintered metal friction materials constitutes a distinct product line. On this point the examiner cited the following testimony of Edward C. Yokel:

> Q. Isn't it true that generally speaking, you use largely the organic and sintered metal friction material for most of your friction material application?
>
> A. Yes.
>
> Q. Then the use of materials such as phosphor bronze and steel on steel would be a minor portion of use of friction materials?
>
> A. Yes, and that is because *the technological advances have, in the main, given us more desirable features in the asbestos and sintered metal group than in the older application group of phosphor bronze on on [sic] steel*" (Tr. 2071, emphasis supplied).

This view is corroborated by the Division Manager of the Wabash Division of Raybestos-Manhattan Company, who stated that steel is not a commonly used friction material but rather a minute factor in comparison to the amount of organic, paper and sintered metal friction materials utilized (Tr. 873). That testimony coming from an official of the largest friction material manufacturer is entitled to considerable weight on this point.

Further, the homogeneous metal material is differentiated from other friction products by virtue of its price which as previously noted is considerably lower than that for other friction materials. Finally, the powder metallurgy technology of the production process for sintered metal friction materials differs fundamentally from that

underlying the manufacture of the homogeneous metal friction materials. On that basis the evidence of interchangeability between homogeneous metal friction materials and other friction materials does not preclude the finding of a submarket confined to the sintered metal product alone.

Respondent contends in any event that the definition of sintered metal friction materials advocated by complaint counsel is too narrow since it excludes certain sintered metal materials which serve a friction function. Specifically, Brake Shoe charges that the complaint definition of sintered metal friction materials as "compressed and sintered to a steel or other backing under high pressure and temperature" is too narrow since it excludes sintered metal friction materials not sintered to a steel or other backing under high pressure and temperature as well as those sintered metal friction materials which have no backing at all but which do perform a friction function. We turn first to the question of whether sintered metal friction material with a steel or other backing possesses features which meaningfully distinguish it from other sintered metal parts which may perform a friction function. The record as a whole indicates that the presence or absence of backing to the material significantly affects its utility.

Sintered metal friction materials are designed for friction properties and generally are not structurally strong. The material therefore requires a strong structural part, frequently of steel[29] as backing to lend the strength and toughness necessary for the proper functioning of the friction element.[30] In addition to furnishing tensile strength, the backing performs the function of absorbing heat or acting as a heat sink.[31] There is also testimony that the

[29] Testimony of John Francis Lowey (Tr. 788).

[30] Howard B. Huntress, Manager, Sinternet Products Development, American Brake Shoe Company, "Friction Elements in the design of Brakes & Clutches", CX 9, p. 125.

[31] Testimony of Robert Biggs (Tr. 624, 628-29).

use of sintered metal friction materials without a backing or steel core in some applications would require twice as many parts.[32] On the basis of the evidence as a whole it is clear that the superior strength and heat absorbing characteristics of the sintered metal friction material with a backing distinguishes it significantly from sintered metal friction parts lacking that element.

Respondent argues further that complaint counsel have abandoned the definition of the complaint defining sintered metal friction materials as bonded or sintered under high temperature and pressure to a steel or other backing, by including in their market share statistics for sintered metal friction materials parts bonded to a backing without the use of high pressure and temperature. On this point complaint counsel contends that the record developed in the hearing demonstrates that heat, pressure and time are dependent variables which can be varied or substituted for each other with engineering know-how. The record supports this position and justifies inclusion in the product market of those sintered metal friction materials bonded or sintered to a backing without resort to high temperature or pressure.

Respondent also apparently asserts that certain sintered metal structural parts may perform a friction function and therefore should be included within the line of commerce. There is, however, a fundamental difference between sintered metal structural parts and sintered metal friction products. The former are simply powdered metal pressed together without any friction modifiers in their composition and they are used mainly as bearings, pinion gears, or mechanical parts, whereas the sintered metal friction material is used either as a brake or a clutch material.[33] Structural sintered metal parts also differ from

[32] Testimony of Benjamin Tolbert Collins (Tr. 896).

[33] Testimony of Clarence Paul Schneider (Tr. 858).

sintered metal friction parts in that the inclusion of non-metallic elements in the latter reduces the amount of metallics contained therein which lend strength to structural parts.[34] While there is some relationship between the technology involved in sintered metal structural parts and sintered metal friction materials since both depend on powder metallurgy, the record demonstrates significant differences in the production process involved in each because of the different objective of the two manufacturing processes.[35] Further, while certain structural parts may have a friction function, in many instances this appears to be fortuitous.[36] Clearly, sintered metal friction material producers and structural parts manufacturers are not in the area of effective competition.

Finally, Brake Shoe's challenge to the examiner's line of commerce finding on the sintered metal submarket, grounded on the contention that it is barred by evidence of interchangeability, cannot be reconciled with the applicable precedents for:

> "... The issue under § 7 is whether there is a reasonable probability of substantial lessening of competition. There can be a substantial lessening of com-

[34] Testimony of Francis John Lowey (Tr. 807-08).

[35] Testimony of Dr. Collins (Tr. 891-94).

[36] E.g., John Smith, Plant Manager of powdered metals with the Kwikset Division of the Emhart Corporation, testified in connection with a part used as a centrifugal clutch shoe for chain saws that "The parts we make at the moment are in my opinion structural parts that we have made before they were ever used as a clutch shoe, and they sufficed." (Tr. 1196). He stated further, while some of the parts produced by this company are used in friction applications the end use of many is unknown to the manufacturer (Tr. 1191).

petition with respect to a product whether or not there are reasonably interchangeable substitutes."[37]

As the Third Circuit recently noted:

> ". . . . The fact that different products may in some sense be competitive with each other is not sufficient to place them in the same market if by themselves they constitute distinct product lines. United States v. Aluminum Co. of America (Alcoa-Rome Cable) 377 U.S. 271 . . . (1964). Nor does the availability of substitute products compel the conclusion that they belong in the same relevant market. United States v. E. I. du Pont de Nemours & Co., 353 U.S. 586 . . . (1957) Reynolds Metals Co. v. Federal Trade Commission. . . ."[38]

The market for § 7 purposes consists of "the product and probably its close substitutes, but does not embrace all products as to which there is a significant cross-elasticity of demand, or which are in a sense broad substitutes even though the existence of substitutes is among the factors which determine the extent of a firm's market power."[39] The Supreme Court has established that although the outer boundaries of a product market may be determined by reasonable interchangeability between substitute products, this does not preclude the existence of well defined sub-

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[37] *Crown Zellerbach Corporation* v. *Federal Trade Commission*, 296 F.2d 800, 814 (9th Cir. 1961), *cert. denied*, 370 U.S. 937 (1962); *General Foods Corporation* v. *Federal Trade Commission*, 386 F.2d 936 (3d Cir. 1967).

[38] *General Foods Corporation* v. *Federal Trade Commission*, *supra* note 37 at 940.

[39] *Ekco Products Company*, F.T.C. Docket No. 8122, 7 (Opinion of the Commission, April 21, 1964), aff'd 347 F.2d 745 (7th Cir. 1965).

markets valid for antitrust purposes within the confines of the broader market.[40]

The boundaries of the submarket may be determined by reference to a number of practical indicia, including industry and public recognition of the submarket as a separate economic entity, the product's peculiar characteristics and uses, unique production facilities, distinct customers, distinct prices, sensitivity to price changes and specialized vendors.[41] Such a submarket may exist though only some of these criteria enumerated by the Supreme Court are applicable in the particular case.[42] The sintered metal friction materials market by virtue of its unique technology and production facilities, a distinct price structure, and the products' peculiar uses and characteristics constitute a market economically significant and meaningful in terms of trade reality.[43] The effect of the acquisition may properly be assessed within its confines.

IV

The hearing examiner in appraising the competitive effect of the merger relied on a survey of sintered metal friction material producers covering the period 1960 through 1962, which delineated the market structure of the industry as follows:

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[40] *Brown Shoe Co.* v. *United States*, 370 U.S. 294, 325 (1962); *United States* v. *Continental Can Co.*, 378 U.S. 441, 457-8 (1964); *United States* v. *Aluminum Co. of America*, *supra* note 17 at 271.

[41] *Brown Shoe Co.* v. *United States*, *supra* note 40 at 325.

[42] *General Foods Corporation* v. *Federal Trade Commission*, *supra* note 37; *Reynolds Metals Company* v. *Federal Trade Commission*, 309 F.2d 223, 228 (D. C. Cir. 1962).

[43] *Crown Zellerbach Corporation* v. *Federal Trade Commission*, *supra* note 37 at 811; *General Foods Corporation* v. *Federal Trade Commission*, *supra* note 37 at 943.

TOTAL SHIPMENTS AND MARKET SHARES OF COMPANIES MANUFACTURING SINTERED METAL FRICTION MATERIALS 1960-1962

Dollar Shipments (f.o.b. plant)

Company	1960			1961			1962		
	Used by the company	All other shipments	Total shipments	Used by the company	All other shipments	Total shipments	Used by the company	All other shipments	Total shipments
American Brake Shoe Co. (CX 10a, b)*	$ 0	$ 2,630,356	$ 2,630,356	$ 0	$ 2,750,008	$ 2,750,008	$ 0	$ 3,517,440	$ 3,517,440
S. K. Wellman Co. (CX 10b, 11)*	0	10,393,746	10,393,746	0	10,676,845	10,676,845	0	11,187,986	11,187,986
Sub-total, 2 companies*	$ 0	$13,024,102	$13,024,102	$ 0	$13,426,853	$13,426,853	$ 0	$14,704,526	$14,704,526
Raybestos-Manhattan, Inc. (CX 90d)	0	3,649,730	3,649,730	0	4,926,630	4,926,630	0	5,306,078	5,306,078
The Bendix Corp. (CX 103e)	1,951,600	229,700	2,181,300	1,268,100	138,000	1,406,100	1,640,900	240,000	1,880,990
General Metals Powder Co. (CX 89a)	0	1,351,313	1,351,313	0	1,584,441	1,584,441	0	1,916,921	1,916,921
General Motors Corp. (CX 91c)	90,971	0	90,971	131,931	0	131,931	450,662	0	450,662
Friction Products Corp. (CX 91d)[1]	—	—	—	—	—	—	—	—	7,750
Chrysler Corp. (CX 93d)	0	541	541	0	2,289	2,289	0	1,243	1,243
R. G. LeTourneau & Co. (Tr. 1147)	90,000	0	90,000	90,000	0	90,000	90,000	0	90,000
Total[2]	$2,132,571	$18,355,386	$20,487,960	$1,490,031	$20,074,613	$21,564,644	$2,181,562	$22,168,768	$24,358,170

Market Shares (in percent)

American Brake Shoe Co.*	0%	14.3%	12.8%	0%	13.7%	12.8%	0%	15.9%	14.4%
S. K. Wellman Co.*	0	56.6	50.7	0	53.2	49.5	0	50.5	45.9
Sub-total, 2 companies*	0%	71.0%	63.6%	0%	66.9%	62.3%	0%	66.3%	60.4%
Raybestos-Manhattan, Inc.	0	19.9	17.8	0	24.5	22.8	0	23.9	21.8
The Bendix Corp.	91.5	1.3	10.6	85.1	0.7	6.5	75.2	1.1	7.7
General Metals Powder Co.	0	7.9	7.1	0	7.9	7.3	0	8.6	7.9
General Motors Corp.	4.3	0	0.4	8.9	0	0.6	20.7	0	1.9
Friction Products Corp.[1]	—	—	—	—	—	—	—	—	—[3]
Chrysler Corp.	0	—[3]	—[3]	0	—[3]	—[3]	0	—[3]	—[3]
R. G. LeTourneau & Co.[4]	4.2	0	0.4	6.0	0	0.4	4.1	0	0.4
Total[2]	100.0%	100.1%	99.9%	100.0%	100.0%	99.9%	100.0%	99.9%	100.1%

* Excludes exports.

[1] Organized in October 1961 and started production in 1962.

[2] If Powdercraft Corp.'s estimated annual shipments of friction parts amounting to $250,000 are included in "Total shipments," Powdercraft would account for 1.1% in 1960, 1.1% in 1961, and 1.0% in 1962. (Tr. 1066)

[3] Less than 0.1%.

[4] LeTourneau has ceased manufacture (CX 107).

We are satisfied that appropriate measures were taken to insure that the significant producers of the product relevant to this proceeding would be included in the survey and that the omissions, if any, are not substantial. There is no indication that the replies in the survey and the testimony of the businessmen in this proceeding relating to the identity of the industry's members, on the basis of their experience, made omissions of consequence to the survey's results.[44]

The survey adequately reflects the reporting companies' production of the relevant product—sintered metal friction parts with a backing. Contrary to respondent's assertion, the fact that some companies reported materials not relevant to the proceeding such as unbacked materials while others failed to do so does not detract from the significance of the data. If anything, the report by firms, other than Wellman and Brake Shoe, of sales figures not properly

[44] To insure that the survey would include the manufacturers of the sintered metal friction materials relevant to this proceeding the survey questionnaire requested the firms contacted to list their competitors in the production and sale of this material. The testimony of representatives of the friction material producers appearing in this proceeding confirmed these responses. Furthermore, pursuant to complaint counsel's request, Brake Shoe by letter of April 19, 1965 (Cx 100) listed therein 22 firms "which to the best of our present knowledge and information are manufacturers of sintered metallic friction products." This listing included the companies reporting in the survey introduced by complaint counsel. Representatives of those concerns listed by respondent but not included in the survey testified generally that they were primarily structural parts manufacturers rather than sintered metal friction materials producers or, if the concern did produce sintered metal parts which might have a friction function they were not of the kind manufactured by Brake Shoe or Wellman. In addition, many of these witnesses testified expressly that their firm did not compete with either Wellman or Brake Shoe in the sale of sintered metal friction materials (see Initial Decision, pp. 22-26, 50-56).

within the line of commerce by inflating the universe favors respondent.[45]

In addition, Brake Shoe contends that the survey's universe rests on inconsistent sales figures since the reporting firms included products sold at different price levels. Brake Shoe objects that sales in the after market were generally at a price 2½ times that charged for the similar unit to an original equipment manufacturer and should not, therefore, be compared with such transactions. Respondent also argues that neither sales reported at the after market level or at original equipment manufacturer prices should be compared with the values reported for intracorporate transfers by sintered metal friction producers engaged in captive production. Such prices would be at a lower level than those charged original equipment manufacturers.

Respondent insists that absent a showing that all the reporting companies made sales at the various price levels in approximately the same proportion, no meaningful conclusions can be drawn from the survey. The fact that the survey figures may not reflect with precision the unit sales by the reporting companies is immaterial. In view of the variety of parts made of sintered metal friction materials (ranging from components of airplane brakes to tractor transmissions), it is unlikely that a comparison of sales on a unit basis would either be practical or informative. The only realistic measure under the circumstances is the sales volume of the reporting companies in terms of price. The fact that certain of the reported sales were made at different price levels does not vitiate the significance of the survey, which reflects the value placed on these transactions by the reporting companies in the regular course of busi-

[45] Insofar as Wellman's figures are concerned to the extent that they contain data which is not relevant, there is no evidence that this significantly affects the survey's results. Respondent, although in the best position to do so, has failed to make such a showing.

ness. This data may, therefore, be regarded as giving a reasonable indication of the market significance of the transactions reported. Despite a possible margin of error in statistics combining sales at different levels of distribution, it nevertheless provides an adequate basis to gauge the significance of this acquisition, for whatever the technical flaws in the compilation of the survey, "precision in detail is less important than the accuracy of the broad picture presented".[46]

The record as a whole corroborates the inferences which may be drawn from the survey data, namely, that the sintered metal friction materials market is highly concentrated and that Wellman and Brake Shoe, along with Raybestos, were the leading suppliers of this product. This is evidenced by the testimony of representatives of the companies themselves and by their responses to the Commission questionnaires initiating the survey.[47] Evidence of this nature emanating from firms actually engaged in the market is entitled to considerable weight as corroboration of the survey data. Accordingly, the figures —despite certain underlying price differences—afford a rough, but serviceable guide for evaluating the structure of this industry and the competitive impact thereon of the Wellman-Brake Shoe merger.

The record shows that the number of significant producers of sintered metal friction materials within the line of commerce relevant to this proceeding is extremely limited. In 1962, there were at most seven companies with an annual volume exceeding $250,000 in the case of

[46] See *Brown Shoe Co.* v. *United States*, *supra* note 40 at 342, n. 69 (1962).

[47] E.g., Ronald Moalli, Chief Sales Engineer of Raybestos, testified Wellman and Brake Shoe are his company's chief competitors in the sintered metal friction material field and he did not know of others that he could consider as competitors (Tr. 3022).

this product.[48] The substantial production of this friction material was concentrated among these firms and among them the Wellman-Brake Shoe combination held by far the predominant share. The competitive significance of the merger is even more readily apparent when viewed in the context of sales of the material in commercial channels as opposed to captive production or intracorporate transfers. There were at best five independent firms with substantial sales in commercial channels and, in fact, the lion's share of such transactions was concentrated among the three leading firms—Wellman, Brake Shoe and Raybestos. Here "[t]he concentration ratio, in other words, is that characteristic of oligopoly".[49] The sintered metal friction material market by virtue of the limited number of substantial competitors participating therein clearly falls in that category of industry structure recognized by the commentators as having the potential for anticompetitive performance because of the concentration of sales among a few.[50] This merger accentuates that condition, of which the Supreme Court stated, "As [it] develops, the greater is the likelihood that parallel policies

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[48] Brake Shoe, Wellman, Raybestos, Bendix, General Motors, General Metals Powder Co., and possibly Powdercraft. As the examiner noted, the testimony indicating that Powdercraft, principally a manufacturer of structural parts and bearings, was responsible for sintered metal friction material production in that amount is subject to controversy. (Initial Decision p. 54).

[49] See *The Procter & Gamble Co.*, F.T.C. Docket 6901 (Opinion of the Commission, November 26, 1963) p. 42, rev'd 358 F.2d 74 (6th Cir. 1966), rev'd 386 U.S. 568 (1967).

[50] The sintered metal friction materials market, as the bleach market in *P&G*, would be characterized by Professors Kaysen and Turner as a "'Type One structural oligopoly' wherein 'the first eight firms have at least 50 percent of total market sales and the first twenty firms have at least 75 percent of total market sales.'" *The Procter & Gamble Co.*, *supra* note 49 at 42, n. 40 citing Kaysen and Turner *Antitrust Policy* 27 (1959).

of mutual advantage, not competition, will emerge".[51] The survey in this record established one thing beyond question —that the industry is highly concentrated and as a result, even without reference to the individual market percentages, it is obvious that the elimination of Wellman as a substantial competitor from the already limited number of producers necessarily leads to the results proscribed by the statute. The margin of error, if any, residing in the market share percentages computed from the survey is therefore of little significance. Our examination of the record accordingly constrains us to affirm the finding of the examiner that the effect of the merger may be to substantially lessen competition in the production and sale of sintered metal friction materials.

That finding is compelled by the standards enunciated by the Supreme Court in its decisions under the merger statute. The Court has held "if concentration is already great, the importance of preventing even slight increases in concentration and so preserving the possibility of eventual deconcentration is correspondingly great."[52] In this case, concentration was already extremely high and the increase thereof resulting from the Wellman-Brake Shoe amalgamation can be considered anything but slight. The market share of the combined concerns meets the standard of presumptive illegality promulgated by the Court in

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[51] *United States* v. *Aluminum Company of America*, *supra* note 17 at 280. According to Professors Kaysen and Turner, "In Type One oligopoly recognition of interdependence by the leading firms is extremely likely . . . [and it is unlikely] that the response of the small sellers will . . . limit the behavior of the larger firms." *Antitrust Policy* 27, *supra* note 50. In more loosely structured markets the existence of an unconcentrated sector may constitute a competitive restraint of varying significance on the concentrated firms. *Ibid.*

[52] *United States* v. *Philadelphia National Bank*, 374 U.S. 321, 365 n. 42 (1963).

United States v. *Philadelphia National Bank*.[53] That presumption has not been rebutted here. Further, the acquisition is clearly within the Court's ruling that where the merging companies are major competitive factors in a relevant market, the elimination of substantial competition between them by merger or consolidation constitutes a violation of § 1 of the Sherman Act.[54] Under the circumstances, the instant case *a fortiori* presents a violation of § 7 of the amended Clayton Act.[55] Contrary to respondent's position, in a case of this nature "Where a merger is of such a size as to be inherently suspect, elaborate proof of market structure, market behavior and probable anticompetitive effects may be dispensed with in view of § 7's design to prevent undue concentration."[56]

Moreover, the finding that the merger has the tendency to lessen competition is also supported by Wellman's record as a pioneer and innovator of new techniques in the sintered metal friction material market. Brake Shoe by virtue of its resources should similarly possess the potential for innovation. The merger of the engineering and research efforts of the technical staffs of the two corporations, however, poses the danger that in order to avoid duplication some new ideas may never be developed or at least that they will not be subjected to the test of the market place. That is a significant consideration in assessing the impact of the merger since engineering and scientific know-how play an extremely important, if not controlling, role in the competitive struggle in this industry.

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[53] *Id.* at 364. See *United States* v. *Continental Can Co.*, *supra* note 40 at 461.

[54] *United States* v. *First National Bank of Lexington*, 376 U.S. 665, 672-73 (1964).

[55] *Fruehauf Trailer Company*, Docket No. 6608 (Commission Opinion, May 28, 1965), p. 6.

[56] *United States* v. *Continental Can Co.*, *supra* note 40 at 458.

V

While the primary issue on appeal is the question of whether the impact of the merger may be evaluated within the confines of the sintered metal friction materials submarket, respondent has raised a number of subsidiary issues. These include Brake Shoe's contention that friction materials generally are not an appropriate market for the purposes of this proceeding and the further argument that the examiner ignored evidence indicating that irrespective of the market definition applied, the merger could not have been anticompetitive because of the "pro-competitive" influence of a number of factors operating on the industry. In this connection, respondent urges whatever adverse effect there might otherwise flow from the acquisition it is neutralized by the economic power and technological ability of the large friction material buyers, the ability of such customers to themselves make the product, and the potential competition of other firms in the powder metallurgy field, as well as of non-friction energy conversion systems.

Respondent asserts the appropriate line of commerce is the overall market for friction energy conversion devices, whether utilizing friction materials or non-friction systems such as hydraulic, hydrostatic and electric drives, transmissions or brakes, etc.,[57] and that the friction materials industry alone is an unrealistic market in the context of this proceeding. In essence, Brake Shoe argues that evidence of interchangeability dictates the placing of friction and non-friction energy conversion devices in the same market. Failing a finding that the proper line of commerce in this case is an overall market for energy conversion devices comprised of both friction and non-friction systems, Brake Shoe insists that the hearing examiner should have taken into consideration the "pro-competitive

[57] See Initial Decision p. 13.

influence of the competition from non-friction functionally equivalent systems and devices".[58]

The finding that friction materials generally are a relevant product market is supported by the evidence. The record as a whole clearly establishes that manufacturers of friction materials consider production of friction materials to be a distinct industry, that the technology involved in friction and non-friction energy conversion devices is on its face completely different, and that non-friction energy conversion systems are distinguished from applications using friction materials by substantial price differences.[59]

There are areas where non friction systems can be substituted for friction brakes or transmissions. Nevertheless, the evidence indicates that the competition between devices utilizing friction materials and non-friction systems on an overall basis at the time of the hearings was marginal.[60] There is testimony that hydraulic and other

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[58] Respondent's appeal brief p. 20.

[59] The Manager of Industry Systems of the Oilgear Company, a manufacturer of hydrostatic transmissions, stated that hydrostatic transmissions are at a cost disadvantage with respect to mechanical transmissions (Tr. 2532). The Executive Vice President of the Sundstrand Corporation testified that hydrostatic transmissions cost approximately 75% more than the parts they displace (Tr. 2743-44), and the Manager of Engineering for the Transportation equipment products operation of the General Electric Company testified mechanical systems would be cheaper than electric drives for off-highway vehicles (Tr. 3183). The conventional mechanical drive using friction materials since it is made in very high volume has an initial cost advantage over other systems (Ferris T. Harrington, Tr. 3332-33).

[60] For example, the Oilgear Company, as a matter of choice, does not generally sell hydrostatic transmissions for mobile applications such as tractors, because it is a high volume, low cost industry. Oilgear prides itself on selling its engineering talents with its products, a factor which is not as important in the mobile industry where there is the danger that the supplier will simply teach the

non-friction systems may be "a threat" to friction materials.[61] At the time of the hearings, however, non-friction and friction devices were not close substitutes and the "threat" conjectural. At best the record indicates such devices may constitute potential rather than effective competition to the friction materials industry.

Similarly, respondent argues that the examiner failed to take into account evidence demonstrating the "pro-competitive influence" exerted by the large original equipment manufacturer (OEM) buyers of friction materials which " 'alone is sufficient to negate any possible inference of anticompetitive effects arising from the merger'." [62] Brake Shoe argues that by virtue of their economic power and technological competence the principal buyers of friction materials have been able to substantially shape the nature of competition among suppliers of these products thus vitiating any anticompetitive effect which might otherwise flow from the merger. In essence, Brake Shoe makes two contentions, first, that the OEM's economic power and technological prowess enables them to extract the lowest possible prices from their suppliers and, second, that the threat of integration into the production of friction materials by certain customers similarly forces independent

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customer how to make his own product (Tr. 2515-16). In the case of International Harvester, at the time of the hearings, 50 out of approximately 10,000 combines made by this manufacturer were equipped with hydrostatic drives (Tr. 2796) and the hydrostatic transmission cost approximately $500 more than the mechanical transmission (Tr. 2800). While there may be future increases in such pilot projects (Tr. 2804) the extent thereof is not clear. Similarly, while Harvester has some plans for utilizing hydrostatic drives in certain of its tractors, at the time of the hearings, all the tractors then in production had mechanical transmissions (Tr. 2797).

[61] Testimony of Brake Shoe officials Francis B. Herlihy (Tr. 4027) and M. B. Terry (Tr. 568-9).

[62] Respondent's appeal brief pp. 19, 20.

suppliers of friction materials to remain competitive in terms of prices and services. Essentially, therefore, it is respondent's argument that "non friction devices and large buyers are a "procompetitve force" because they constitute potential competition to sellers already in the market. Related to the argument that OEM customers constitute potential competition is Brake Shoe's further contention that they have "shaped competition" by virtue of their power to extract the lowest possible prices from suppliers in the indepeident segment of the market. Here, Brake Shoe in essence resorts to the concept of countervailing power.

Brake Shoe similarly insists that in evaluating the commercial setting in which friction materials are marketed, the hearing examiner and the Commission should take into account the potential competition with respect to sintered metal friction materials represented by manufacturers primarily engaged in the production of structural parts and bearings. Passing over for the moment, the question of whether potential competition is relevant in the case of a horizontal merger, the few entrants into sintered metal friction materials production and their subsequent experience indicate that entry is not necessarily easy.[63]

The record suggests that while it may not be overly difficult to secure the physical facilities for making the product, this is not the only problem facing a prospective

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[63] E.g., the President of Friction Products Company, whose first year sales in 1962, totalled $7,750, admitted that at the time of the hearings in 1965, his current sales figures were not substantial, although he was more hopeful of the future, and that this firm was still operating at a loss (Tr. 785). In the case of Compax Inc., another firm cited by Brake Shoe in its argument on this point, the evidence indicates no more than that this concern delivered approximately 715 parts similar to those made by Wellman to Douglas Aircraft in 1965. The performance of the product at the time of the hearings had not yet been determined (Tr. 3366, 3382).

entrant. It may take considerable time for a would be supplier of friction materials, whether organic or sintered metal, to qualify for the business of certain customers.[64] Further, as already noted, powdered metal technology does not depend on scientific principle alone, but it is also an art based on empirical know-how[65] and the development of new products may take several years.[66] Another and inescapably important consideration in an assessment of entry barriers is the difficulty of securing technically qualified people.[67] No categorical answer as to whether it is easy to expand from structural parts manufacturing to sintered metal friction parts is justified on the basis of this record.[68]

Essentially, therefore, it is respondent's argument first, that low entry barriers and the potential competition of original equipment manufacturers, structural parts manufacturers, and non-friction energy conversion devices by restraining the market power of existing sintered metal friction materials producers nullify the effects of the acquisition, and secondly, that the countervailing power of large buyers to force prices down to the lowest possible levels achieves the same result. Were this a conglomerate or a market extension merger respondent's argument with respect to the ameliorating effects of potential competition and low entry barriers might have some relevance. The Brake Shoe-Wellman merger is, however, a horizontal acquisition involving the elimination of substantial actual competition, and respondent's argument is in direct conflict with the previous Commission decisions on this issue.

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[64] Edward C. Yokel (Tr. 2076-77); Archer W. Brown, American Hoist and Derrick Company (Tr. 3844).

[65] Fritz V. Lenel (Tr. 3538).

[66] Wellman Deposition (Tr. 4087).

[67] Earle Lowe (Tr. 1695-96).

[68] *Id.* (Tr. 1667-68).

Actual and potential competition are not completely interchangeable concepts,[69] since the effects arising from the absence of actual competition are rarely, if ever, cancelled out completely by the presence of even substantial potential competition.[70] Although potential competition in a concentrated market may keep prices down to entry discouraging levels, such levels may be, and are likely to be, substantially higher than the prices which would be set by vigorous competition among the sellers already in the market.[71] As we previously noted:

> ". . . [the restraint of potential competition] leaves the monopolist free to set prices within at least a range, and, even if it has a definite moderating effect on price, it is less likely to be effective in encouraging technological innovation in the particular product line involved. . . ."[72]

Similarly with respect to the ease of entry factor, the finding that entry into a market is difficult is not indispensable to the finding of illegality under § 7, since potential competition does not excuse the elimination of actual competition.[73]

> ". . . where the merger's effects on competition are those proscribed by Section 7, its illegality cannot be overcome by a showing of ease of entry . . . Ease of entry may, to be sure, cause the market power of established firms to be eroded by the advent of significant new competitors; but this is likely to be at best a long-term affair. . . ."[74]

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[69] *Beatrice Foods Company*, F.T.C. Docket No. 6653 (Opinion of the Commission, April 26, 1965) p. 29.

[70] *Ibid.*

[71] *Ibid.*

[72] *Ekco Products Company*, *supra* note 39 at 7.

[73] *Id.* at 6.

[74] *Ibid.*

In sum, substitute competition is not a proper defense here, since it does not limit market power sufficiently.[75] Further:

> "'The loss of a substantial firm, however, may of itself induce a reduction in the vigor of competition. For even if new entrants are coming into the market or concentration is for some other reason declining, there will be one less substantial firm than would have existed but for the merger, and an adverse finding under § 7 is predicated on the presumption that competition would have benefited had that firm remained independent'."[76]

Under the circumstances, the examiner clearly did not err in failing to give weight to the factors which Brake Shoe contends operate as a "pro-competitive" influence and on which it relies as negating the effects of the merger. To have done so, would have resulted in findings on issues which are essentially irrelevant. In administering § 7 of the Clayton Act, the Commission as the Courts:

> ". . . must be alert to the danger of subverting congressional intent by permitting a too broad economic investigation . . . And so in any case in which it is possible, without doing violence to the congressional objective, embodied in § 7, to simplify the test of illegality, the courts ought to do so in the interest of sound and practical judicial administration. . . ."[77]

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[75] *Id.* at 7.

[76] *Crown Zellerbach Corporation* v. *Federal Trade Commission*, *supra* note 37 at 830 n. 39 citing Bok "Section 7 of the Clayton Act and the Merging of Law and Economics", 74 Harv. L. Rev. 226 (1960).

[77] *United States* v. *Philadelphia National Bank*, *supra* note 52 at 362.

Applying the tests advocated by respondent would on its face violate that injunction.

The argument that the countervailing power of large buyers negates the competitive impact of the acquisition is similarly out of place. That concept is antithetical to antitrust policy which depends on the free play of competitive forces to regulate the market. As a practical matter, a policy devoted to dividing market power between large sellers and buyers is more likely to restrain than to promote competition.[78]

The final issue presented by Brake Shoe's appeal is the proper scope of the order. The respondent does not challenge the Commission's power to order divestiture assuming a violation of § 7 has been documented. On the contrary, it insists this is the only remedy available. Brake Shoe does challenge the Commission's power, under the statute, to order a ban on future acquisitions. The appeal on that ground is denied. The Commission's powers under § 11(b) of the Clayton Act encompass broad equitable relief beyond simply divestiture. See *Ecko Products Company*, Docket No. 8122,[79] which anticipated the arguments on this issue advanced by Brake Shoe. Wellman to be sure must be restored to its preacquisition posture as a viable competitor in the sintered metals friction materials market. Divestiture, alone, however, is not sufficient in this case to safeguard competition over the long run. Brake Shoe's tendency to expand by acquisition rather than internal expansion coupled with the high degree of concentration in the market dictate a ban for ten years on future acquisitions of other sintered metal friction material producers unless such mergers are approved by the Commission. "Prophylactic relief, not

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[78] Compare *id.* at 370.

[79] *Supra* note 39.

merely the after-the-fact remedy of divestiture, is essential"[80] to effectively carry out the Congressional policy expressed by § 7 of the Clayton Act in this industry. Since we have evaluated the competitive impact of the merger on the sintered metal friction material submarket rather than in the market for friction materials generally, the provision in the examiner's order on this point will be modified to limit its application to sintered metal friction materials alone. This provision of course "is in no sense an absolute ban on such acquisitions. In deciding whether or not to approve a proposed acquisition submitted under such an order, the Commission is not free to act capriciously or unreasonably. It may deny approval only where the acquisition, if consummated, would conflict with the remedial objectives of the order."[81]

For the foregoing reasons respondent's appeal, except to the extent noted, is denied and the hearing examiner's decision as modified and supplemented by this opinion and the findings contained therein is adopted as the decision of the Commission.

Commissioner Nicholson did not participate for the reason oral argument was heard prior to his appointment to the Commission.

April 10, 1968

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[80] See *Beatrice Foods Company*, F.T.C. Docket No. 6653 (Opinion Accompanying Final Order, December 10, 1965) p. 5.

[81] *Beatrice Foods Company*, *supra* note 69 at 48 n. 48.

APPENDIX F

UNITED STATES OF AMERICA
BEFORE
FEDERAL TRADE COMMISSION

Docket No. 8622

Filed: August 19, 1966

In the Matter of

AMERICAN BRAKE SHOE COMPANY, a corporation.

Initial Decision

ELDON P. SCHRUP, Hearing Examiner.

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Carson M. Glass, Esq.,
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Washington, D. C.,
Counsel for the Respondent.

STATEMENT OF PROCEEDINGS

The Federal Trade Commission on May 12, 1964 issued its complaint charging the respondent American Brake Shoe Company, a corporation, with violation of Section

7 of the Clayton Act as amended.[1] The complaint alleges the respondent with total sales of over $194,000,000 in 1962 to be a large, diversified manufacturer of various products, including organic and sintered metal friction materials sold in interstate commerce throughout the United States. It is further alleged that respondent on April 16, 1963 acquired all the corporate stock of the S. K. Wellman Company, a corporation, with 1962 sales in excess of $12,000,000 and also engaged in the manufacture of sintered metal friction materials sold in interstate commerce throughout the United States.

The complaint alleges the entire friction materials industry in the United States to consist of approximately thirty-two companies in 1961 and the total sales of all said companies to have been approximately $159,000,000. The five largest companies are alleged to have accounted for 55% of total sales, and the ten largest companies to have accounted for 84% of total sales. The American Brake Shoe Company is alleged to have ranked sixth and the S.K. Wellman Company to have ranked eighth in sales among these thirty-two companies in 1961.

Sintered metal friction materials are alleged in the complaint to be manufactured, sold and distributed by approximately six companies. At the time of the acquisition it is further alleged that the American Brake Shoe Company and S.K. Wellman were substantial, actual and potential competitors in the sale of friction materials and of sintered metal friction materials and that as a direct result of the acquisition, respondent American Brake Shoe

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[1] "Sec. 7. That no corporation engaged in commerce shall acquire, directly or indirectly, the whole or any part of the stock or other share capital and no corporation subject to the jurisdiction of the Federal Trade Commission shall acquire the whole or any part of the assets of another corporation engaged also in commerce, where in any line of commerce in any section of the country, the effect of such acquisition may be substantially to lessen competition, or to tend to create a monopoly."

Company is now the second ranking producer of friction materials and the leading producer of sintered metal friction materials in the United States.

The complaint in conclusion alleges the foregoing acquisition by respondent American Brake Shoe Company may be to substantially lessen competition or tend to create a monopoly in the production, distribution and sale of friction materials in general, and sintered metal friction materials in particular, throughout the United States.

Respondent on August 18, 1964 filed answer to the complaint admitting some and denying other of its allegations. Respondent's answer denies the allegations of the complaint with respect to the relevant product market for friction materials and the relevant product submarket of sintered metal friction materials therein set forth, and further states respondent to be without knowledge or information sufficient to form a belief as to the complaint's allegations relative to the number of companies, their sales and respective rank in the friction materials industry. Respondent's answer denies the effect of the acquisition as alleged in the complaint and that such acquisition constituted a violation of Section 7 of the Clayton Act as amended.

Following a series of formal and informal prehearing conferences, the hearing for the presentation of the case-in-chief commenced in Washington, D.C., on October 25, 1965 and ended November 10, 1965.[2] The presentation of

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[2] The lengthy and involved procedural history of this matter before the hearing examiner, the Commission and the Courts chiefly relates to respondent's requested avenues of discovery both prior to and during the course of the hearing. See, for example, *American Brake Shoe Co.* v. *Schrup, et al*, Civil No. 3091 (D. Del. 1965), CCH 1965 Trade Cases Par. 71,575. All the requested discovery procedures, both as denied and as subsequently in part granted by the hearing examiner, are a matter of record herein and a detailed further recital would unnecessarily burden this statement of the proceedings.

the defense commenced in Washington, D.C., on January 4, 1966 and ended April 5, 1966. No rebuttal hearing was held and the record for the reception of evidence was closed on April 8, 1966. The transcript of record consists of 4811 pages. Complaint counsel presented the testimony of 29 witnesses and respondent presented the testimony of 61 for a total of 90 witnesses. Received in evidence are some 123 documentary and physical exhibits submitted by complaint counsel and 165 submitted by respondent for a total of 288 exhibits.

Respective counsel were afforded full opportunity to be heard, to examine and cross-examine all witnesses and to introduce such evidence as is provided for under Section 3.14(b) of the Commission's Rules of Practice for Adjudicative Proceedings.

Proposed findings of fact, conclusions, supporting briefs, and replies thereto were filed by respective counsel, and counsel supporting the complaint submitted a proposed order to cease and desist. Oral argument thereon by respective counsel was held before the hearing examiner on July 15, 1966. Proposed findings and conclusions submitted and not adopted in substance or form as herein found and concluded are hereby rejected.

After carefully reviewing the entire record in this proceeding as hereinbefore described, and based on such record and the observation of the witnesses testifying herein, the following Findings of Fact and Conclusions therefrom are made, and the following Order issued:

Findings of Fact

I. *American Brake Shoe Company*

1. Respondent American Brake Shoe Company[3] (Brake Shoe) is a corporation organized and existing under the

[3] American Brake Shoe Company changed its name to Abex Corporation on April 26, 1966 (Resp. proposed findings of fact No. 1).

laws of the State of Delaware, with office and principal place of business at 530 Fifth Avenue, New York, New York. Brake Shoe is a diversified manufacturer of friction materials, hydraulic products, railroad products, castings and forgings; and at all times relevant herein, sold its products in interstate commerce throughout the United States.[4]

2. In pre-merger year 1962 Brake Shoe had total shipments of all products in the amount of $194,892,299 and total assets of $150,101,628 at year end.[5] In 1963 following the acquisition of the S. K. Wellman Company total shipments of all products rose to $214,669,000 and year end total assets were $160,350,613.[6] Brake Shoe's sales of friction materials in 1963 were 15% of overall sales. Sales of friction materials in merger year 1963 were $31,500,000 in comparison to $17,700,000 for per-merger-year 1962.[7]

3. Brake Shoe's 1963 Annual Report with reference to the marketing of its friction products states in part as follows:

> Brake Shoe's friction products have a wide variety of uses. In the automotive field they include brake linings for passenger cars, trucks and buses. Our heavy duty materials are used in clutches and transmissions for trucks and military vehicles.
>
> For aircraft, the company supplies special braking materials to meet the requirements of almost any type of plane from small craft to large commercial and military jets.

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[4] Admitted, Resp. Answer, Pars. 2, 3, 5.

[5] Comm. Ex. No. 7, Brake Shoe's 1962 Annual Report.

[6] Comm. Ex. No. 8, Brake Shoe's 1963 Annual Report.

[7] Comm. Ex. Nos. 7, 8, above.

Industrial applications include friction materials for clutches, transmissions and brakes on tractors, materials-handling trucks, mining and earth-moving equipment and numerous types of industrial machines.

Brake Shoe enjoys a sizable volume of sales in friction products to the car and truck manufacturers and the builders of industrial equipment and farm machinery.

4. Brake Shoe's 1961 Annual Report[8] has this to say in part about its pre-merger market position and the composition of its friction products:

Through its American Brakeblok Division, the company is a major producer of both organic and metallic friction materials. Our principal products are brake lining for cars, trucks and buses. These are made of asbestos and other materials bonded under heat and pressure with an organic resin.

Automotive friction materials are sold to both vehicle manufacturers and the replacement market, with replacement accounting for the larger part of our business. In the United States alone there are more than 75,000,000 vehicles on the road, and approximately one-quarter of them require brake re-lining each year.

The company's replacement brake lining is sold in the United States and Canada through nationwide distribution networks and is available to virtually every automotive serviceman. Replacement linings are also sold to other companies that market them under private brand labels.

A fully-loaded jet airliner such as the Boeing 707 weighs about 250,000 pounds and lands at speeds as high as 138 miles per hour. Ordinary materials would

[8] Comm. Ex. No 6, Brake Shoe's 1961 Annual Report.

melt under the terrific heat generated by its brakes, so American Brakeblok makes jet plane braking materials out of sintered metals. This type of material is first formed out of powdered metals into near-finished shape, and is then fused solid under heat and pressure.

Sintered materials also have the heat and wear resistance needed to stand up under grueling use in crawler tractors and heavy earthmoving equipment. American Brakeblok provides clutch and brake parts of sintered metals for construction equipment and other types of industrial machinery.

With extensive research and production facilities in both organic and metallic materials, Brake Shoe is equipped to provide friction materials engineered for almost every use.

5. Brake Shoe's organic friction material brakelining, clutch facings and transmission parts for automotive and industrial use are produced in its Winchester, Virginia, plant. Brake Shoe's sintered metal friction material brakelining, clutch facings and transmission parts for automotive and industrial use are produced in its Cleveland, Ohio, plant[9] and the since acquired S.K. Wellman Company plant at Bedford, Ohio.

The following tabulation[10] shows the pre-merger 1961

[9] Brake Shoe acquired its Cleveland, Ohio, plant in 1954 from the Metallic Friction Material Company. This company was founded by a former engineer employee of the S. K. Wellman Company and at the time of its acquisition by Brake Shoe was engaged in the production of sintered metal friction materials (Tr. 763).

[10] Compiled from Comm. Ex. Nos. 79 and 86, supplied by respondent's counsel pursuant to Comm. Ex. No. 1, submitted under date of November 26, 1962, to the Federal Trade Commission for a pre-merger clearance. Export sales of $1,350,000 are included in the Wellman grand total.

sales of these organic friction material products by Brake Shoe's Winchester plant and those products made of sintered metal friction materials by its Cleveland plant and by the then S.K. Wellman Company plant:

Automotive Friction Materials

	Winchester Plant	Cleveland Plant	S.K. Wellman Plant
Brakelining	$8,138,000	$ 0	$ 705,316
Clutch Facings	3,000	6,000	1,156,616
Transmission Parts	37,000	587,000	432,576
Total Automotive	8,178,000	593,000	2,294,508

Industrial—Non-automotive Friction Materials

Brakelining	1,044,000	1,081,000	565,200
Clutch Facings	0	728,000	7,234,006
Transmission Parts	0	341,000	2,013,000
Total Industrial	1,044,000	2,150,000	9,812,206
Grand Total	9,222,000	2,743,000	12,106,714

The foregoing tabulation shows that if the proposed merger between the American Brake Shoe Company and the S.K. Wellman Company had been consummated as early as 1961, that American Brake Shoe's sales share in the automative market for organic and sintered metal brakelining, clutch facings, and transmission parts would rise from $8,771,000 to $11,065,508. In the industrial market, respondent's sales share for organic and sintered metal brakelining, clutch facings, and transmission parts would rise from $3,194,000 to $13,006,206. In the combined markets American Brake Shoe's total sales share would rise from $11,965,000 to $24,071,714, or a sales increase of 101% or better as a result of a merger.

6. An analysis of Brake Shoe's automotive organic and sintered metal friction material brakelining, clutch facing and transmission part sales to its ten most impor-

tant customers in 1961[11] shows ten customers to account for $7,000,045 in automotive brakelining sales,[12] ten customers to account for $4,307 in automotive clutch facing sales[13] and nine customers for $626,885 in automotive transmission parts sales.[14] Automotive sales in these three product categories totaled $7,631,237 to these groups of customers out of all customers sold in the amount of $11,965,000 as shown on Commission Exhibit No. 79, footnote 10 and the tabulation in preceding Finding No. 5. For industrial use in 1961, Brake Shoe's brakelining sales in the amount of $1,778,701 were accounted for by ten customers,[15] clutch facings sales of $718,937 were accounted for by ten customers[16] and transmission parts sales of $363,916 by ten customers.[17] Industrial sales in these three categories totaled $2,861,554 to these groups of customers out of all customers sold in the amount of $3,194,000 as shown on Commission Exhibit No. 79, footnote 10 and the tabulation in preceding Finding No. 5.

In turn, Commission Exhibit No. 87 shows 1961 sales by Wellman of automotive brakelining to ten customers in the amount of $157,753,[18] automotive clutch facings in the

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[11] Comm. Ex. No. 80 submitted by respondent's counsel November 26, 1962 as per footnote 10, supra.

[12] Top purchasers were the Wagner Electric Corporation under a private brand, and the National Automotive Parts Association (N.A.P.A.) for after-market or replacement sale.

[13] Top purchaser was N.A.P.A.

[14] Top purchaser was Ford Motor Company; other purchasers were Balkamp, Inc. and Borg-Warner Corporation.

[15] Top purchasers were B.F. Goodrich Company, Goodyear Aircraft Corporation, Warner Electric Brake & Clutch Company, Auto Specialties Mfg. Co., Caterpillar Tractor Company, Bendix Corporation, Bucyrus-Erie Company and Clark Equipment Company.

[16] Top purchasers were Caterpillar Tractor Company and Le Tourneau-Westinghouse.

[17] Top purchaser was Caterpillar Tractor Company.

[18] All were small purchasers in dollar amount.

amount of $434,002 to ten customers[19] and automotive transmission parts in the amount of $373,930 to ten customers.[20] Product sales in these three categories totaled $965,685 out of $2,294,528 to all customers as shown on Commission Exhibit No. 86, footnote 10 and the tabulation in preceding Finding No. 5. In 1961 Wellman sold industrial brakelining in the amount of $447,896 to ten customers,[21] industrial clutch facings in the amount of $2,144,185 to but ten customers[22] and industrial transmission parts in the amount of $2,013,000 to but ten customers.[23] Wellman's product sales in these three categories totaled $4,605,081 to these groups of customers out of $9,812,206 to all customers as shown on Commission Exhibit No. 86, footnote 10, and the tabulation in preceding Finding No. 5.

The combination of Brake Shoe's and Wellman's sales in the foregoing three categories would have resulted in sales of $8,596,022 in the automotive field and of $7,466,635 in the industrial field of 1961. Sales to these small groups of customers in the automotive field would account for $8,596,922 of the total sales of brakelining, clutch facings and transmission parts of all customers amounting to $11,065,508. In the industrial field sales to these small groups would account for $7,466, 635 out of $13,006,206 in sales

[19] Top purchaser was Borg-Warner Corporation; others were all small in dollar amount.

[20] Top purchasers were Ford Motor Company and Borg-Warner Corporation; others were small in dollar amount.

[21] Top purchaser was Caterpillar Tractor Company; other purchasers included Borg-Warner Corporation and Curtiss-Wright Corporation.

[22] Top purchaser was Goodyear Aircraft Corporation; others were small in dollar amount.

[23] Top purchaser was General Motors Corporation. Others were Caterpillar Tractor Company, U. S. Ordnance Department, Clark Equipment Company, Hyster Company, Allis-Chalmers Mfg. Company and J. I. Case Co.

to all customers. The small groups of customers on Commission Exhibit Nos. 80 and 87[24] would account for $16,063,557 of Brake Shoe's and Wellman's 1961 combined sales of $24,071,714 in friction material brakelining, clutch facings and transmission parts. The record in this proceeding does not show this sales situation to have changed at the time of Brake Shoe's acquistion of Wellman.

7. With regard to Brake Shoe's proposed acquisition of Wellman, Commission Exhibit No. 71 dated June 13, 1962, prepared by Mr. W.T. Kelley, First Vice President and a Director of American Brake Shoe Company, for presentation to the Board of Directors,[25] reads as follows:

"S. W. Wellman Co.
Cleveland, Ohio.

(Not to be confused with Wellman Engineering Company, also of Cleveland).

Product—Sintered metallic friction materials similar to Sinternet product line of Brakeblok—but more complete—truck blocks.

Market—About $100 million for organic and metallic friction materials.

Shipments—About $12 million in 1960 and 1961—both original equipment and replacement.[26]

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[24] Comm. Ex. No. 87 like No. 80 was submitted by respondent's counsel November 26, 1962, as per footnote 10, supra.

[25] See Tr. 469-470.

[26] Comm. Ex. No. 11, prepared October 22, 1964, by the Division Comptroller, Friction Materials Group, American Brake Shoe Company, certifies the S.K. Wellman Company gross shipments, less sales returns and allowances, of sintered metallic friction materials to be as follows:

"Year ended December 31, 1960	$11,775,775
Year ended December 31, 1961	12,116,319
Year ended December 31, 1962	12,421,240
Year ended December 31, 1963	12,790,408"

Facilities—Plant at Bedford 300,000 feet, lease 7 warehouses, fully integrated own stamping department, plating, manufacture own powders. Employ 670 people, 475 shop. (Sintermet 25,000 feet, employ 160 people, 135 shop.)

Management—Good—Chairman and Founder S. K. Wellman, inactive; President Biggs. Competent Sales, Engineering and Research talent.

Earnings—1961 $919,000 after tax, or 7.8% on sales. $4.33 per common share. Expect to do better this year.

Method of Acquisition—Preliminary only—exchange of stock, probably share for share and hopefully 'pooling of interest'.

Benefits to Brake Shoe—

1) Secondary distribution system for our organic friction material.[27]

2) More complete and advanced metallic friction line for our existing distribution system, particularly automotive.

3) Better and more completely integrated manufacturing facilities into which we can consolidate our own manufacturing.

4) Enhance sales and earnings. Projected return before taxes on funds invested of over 19%.

WTK-6-13-62."

8. Brake Shoe on April 16, 1963 acquired all of the corporate stock and assets of Wellman in exchange for 223,656 shares of Brake Shoe's corporate stock of the approximate market value of $12,468,822.[28]

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[27] The record does not disclose that this has happened in any substantial degree following the merger in 1963.

[28] Admitted, Resp. Answer, Par. 17.

H. S. K. Wellman Company

9. Prior to its acquisition on April 16, 1963 by Brake Shoe, The S.K. Wellman Company (Wellman) was a corporation organized and existing under the laws of the State of Ohio, with office and principal place of business at 200 Egbert Road, Bedford, Ohio. Wellman operated one plant at Bedford, Ohio, which was and since is engaged principally in the manufacture of sintered metal friction materials sold in interstate commerce throughout the United States. Wellman's total assets were $8,434,899 as of December 1, 1962.[29] It was a well managed financially successful and growing company with competent sales, engineering and research talent.[30]

10. Wellman's main products were sintered metal friction brakelining, clutch facings, and transmission parts for automotive and industrial use.[31] Wellman's net sales were $11,775,775 for 1960, $12,146,319 for 1961, $12,421,240 for 1962, and $12,790,408 for 1963, according to Commission Exhibit No. 11 as certified October 22, 1964 by the Division Comptroller, Friction Materials Group, American Brake Shoe Company.[32] In 1961 Wellman sold $1,156,616 of sintered metal automotive clutch facings in comparison with Brake Shoe's penetration of only $6,000. In the industrial field Wellman sold $7,234,006 of sintered metal clutch facings in comparison to Brake Shoe's sales of $728,000 and $2,013,000 of sintered metal transmission parts as against Brake Shoe's sales of $341,000 of such friction parts.[33]

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[29] Admitted. Resp. Answer, Pars. 6, 7, 8.

[30] Comm. Ex. Nos. 64 A-L, 71, 84, 85.

[31] Comm. Ex. Nos. 86, 87.

[32] Comm. Ex. No. 11.

[33] See tabulation in preceding Finding No. 5. Also see paragraph numbered "2)" in memorandum on proposed acquisition of Wellman set forth in preceding Finding No. 7.

III. The Lines of Commerce

11. Applicable to the instant acquisition by Brake Shoe of Wellman is the prohibition of Section 7 of the Clayton Act reading "where in any line of commerce in any section of the country, the effect of such acquisition may be substantially to lessen competition, or to tend to create a monopoly."[34] Commission and court opinions define "any line of commerce" to mean the relevant product market and/or relevant product submarket; "any section of the country" to mean the relevant geographic area; and "may be" means probable as distinguished from an actual substantial lessening of competition. Further, the instant acquisition admittedly is a "horizontal" merger between two manufacturing seller competitors.[35] By stipulation between the parties, the relevant geographic market for determining the effects upon competition of the acquisition by respondent of the S.K. Wellman Company is the United States as a whole.[36] It has also been stipulated between the parties that there are no unexpired United States patents of commercial significance in the manufacture of friction materials and sintered metal friction materials as defined in the complaint.[37]

12. Friction materials, the subject matter of the complaint,[38] are mainly employed by Brake Shoe and Wellman in the manufacture of three principal categories of products. These product lines are brakelining, clutch facings

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[34] See footnote 1, page 2 preceding, for this section in full.

[35] Tr. 4609.

[36] Ordered filed of record herein on March 18, 1965.

[37] Ordered filed of record herein on July 26, 1965.

[38] Friction materials can be broadly classified as "organic friction materials" made from asbestos and/or other materials, homogeneous metal materials, and "sintered metal friction materials" made from blended metal powders, with the addition of other materials for any particular friction characteristics needed.

and transmission parts sold for automotive and industrial use. In the automotive field these products would be sold to manufacturers of brake, clutch and transmission part assemblies, and to the original equipment manufacturer for both installation on the vehicle and after-market or replacement service for passenger cars, trucks, buses and other over-the-highway vehicles and equipment. Their after-market distribution channels would in brief be auto parts jobbers, auto and truck dealers, and passenger car and truck manufacturers' factory service divisions. In the non-automotive or industrial field the products would also be sold to the original equipment manufacturer for both installation on the original equipment and for after-market or replacement service on aircraft, construction equipment, farm machinery, industrial machinery, materials handling equipment, oil well drilling, mining machinery and other uses. The after market distribution channels here would in brief be industrial equipment parts jobbers; and equipment and machinery manufacturers' factory service sales operations.[39]

13. Respondent, in its Memorandum in Support of Respondent's Proposed Findings of Fact and Conclusions of Law at page 6, would contend that the evidence establishes the proper relevant product market for evaluating this merger to be one well beyond that set forth in the complaint. At pages 14-15 of its memorandum, respondent contends that the relevant area of competition in which the producers of "friction materials" are engaged also embraces manufacturers of other systems, devices and components not employing "friction materials" but adapted to performing the same function: the transmis-

[39] See Commission Exhibit No. 65 entitled, The United States Market For Friction Materials; American Brake Shoe Company Marketing Research Department, under date of November 10, 1962, at pages 2-3, titled "Scope of Market for Friction Materials."; Resp. Proposed Findings of Fact, Nos. 3 through 6; and 9 through 12.

sion, conversion, and retardation of motion. These systems, devices and components according to respondent afford interchangeability of use with "friction materials" for the same end function and include hydrostatic systems which perform the function by means of hydraulic principles, hydrokinetic devices, electrical systems and others which for such reason must therefore be included in the relevant product market. This contention is rejected.[40]

14. Manufacturers of non-friction systems, components and devices such as serrated tooth clutches, eddy current clutches, magnetic particle clutches, electroviscous clutches, silicone slip clutches, hydrokinetic or hydrodynamic fluid couplings and torque converters, hydraulic, hydrostatic, and electric drives, transmissions and brakes are not manufacturers of friction materials. These systems, components and devices eliminate the need for the use of friction materials produced by friction materials manufacturers. Friction materials, as such, are well known for what they are by all of the manufacturers of friction materials and the trade concerned. The fact that these systems, components and devices compete with and can substitute in use for friction materials does not constitute these systems, components and devices as being friction materials. It does not make the manufacturers of these systems, components and devices manufacturers of friction materials.

15. Respondent's foregoing contention for the inclusion of the above systems, components and devices in the relevant product market and submarket set forth in the complaint, runs directly *contra* to the holding of the Court in *United States v. Aluminum Co. of America, et al.* 233 F. Supp. 718 (E.D. Mo. 1964), affirmed per curiam, October 11, 1965, 382 U.S. 12. The district court in this case found that metal curtain wall was a line of commerce and that aluminum curtain wall was a well-defined submarket, there-

[40] Respondent's Proposed Findings of Fact, at pages 197-219.

in and as such, that it was also a line of commerce under Section 7 of the Clayton Act.

The following appears at pages 725-726 of the Opinion:

"This Court finds that metal curtain wall is a line of commerce and that aluminum curtain wall is a well defined submarket therein and as such is also a line of commerce under Section 7.

"In arriving at this conclusion, we must look to see what the Supreme Court has said in recent cases as it applies to the facts in this case.

"In Brown Shoe Co. v. United States, 370 U.S. 294, 1. c. 324, 82 S. Ct. 1502, 1. c. 1523, 8 L. Ed. 2d 510, the Court said:

> '[D]etermination of the relevant market is a necessary predicate to a finding of a violation of the Clayton Act because the threatened monopoly must be one which will substantially lessen competition "within the area of effective competition." Substantiality can be determined only in terms of the market affected.'

and l. c. 325, 82 S. Ct. l. c. 1523, 1524:

> 'The outer boundaries of a product market are determined by the reasonable interchangeability of use or the cross-elasticity of demand between the product itself and substitutes for it. However, within this broad market, well defined submarkets may exist which, in themselves, constitute product markets for antitrust purposes. United States v. E. I. du Pont de Nemours & Co., 353 U.S. 583, 593-595. The boundaries of such a submarket may be determined by examining such practical indicia as industry or public recognition of the submarket as a separate economic entity, the product's peculiar characteristics and uses, unique production facili-

ties, distinct customers, distinct prices, sensitivity to price changes, and specialized vendors. * * *

"In this case the broad outer boundaries are 'curtain wall' where all types of building materials compete. Within that outer market 'metal curtain wall' and 'aluminum curtain wall' are meaningful product markets or 'lines of commerce'.

"The industry recognizes 'metal curtain wall' as distinct and different from precast or any other type of curtain wall. The customers are the building owners as they are guided by the architects and contractors. When an aluminum curtain wall is called for, the vendors of precast concrete, brick or stone are not called in to make a sub-bid. Only those vendors of aluminum. If some other metal is an alternate, then vendors of that metal are called in to make a sub-bid.

"There are specialized vendors of metal curtain wall, who deal in both steel and aluminum or in steel, bronze and aluminum. But except for one vendor, Kawneer, who also owns a concrete company which is operated as a separate unit, metal vendors do not deal in concrete and concrete vendors do not deal in metal.

"Production facilities for aluminum curtain wall are unique and specialized. The extrusion presses and the hard-coat finish with color such as Duranodic or Kalcolor require special and distinct facilities to produce.

"The Court pointed out in U. S. v. E. I. du Pont & Co., 353 U.S. 586, 1. c. 593, 77 S. Ct. 872, 1 L. Ed. 2nd 1057, that 'automotive finishes and fabrics' have sufficient peculiar characteristics and uses to constitute a 'line of commerce' separate and distinct from all other finishes and fabrics. So do metal curtain walls and aluminum curtain walls.

"What we are really determining are the 'trade realities', U. S. v. Philadelphia Nat. Bank, 374 U.S. 321, 1. c. 357, 83 S. Ct. 1715, 10 L. Ed. 2d 915. The line of commerce may be a broad line of commerce as outlined by the Court in United States v. Continental Can Co., 84 S. Ct. 1738, page 1747, decided June 22, 1964.

> * * * we hold that the inter-industry competition between glass and metal containers is sufficient to warrant treating as a relevant product market the combined glass and metal container industries and all end uses for which they compete. * * *'

"The line of commerce may be a narrow one. U.S. v. Aluminum Co. of America, 377 U.S. 271, 1. c. 277, 84 S. Ct. 1283, 1. c. 1287, 12 L. Ed. 2d 314:

> 'Thus, contrary to the District Court, we conclude (1) that aluminum conductor and copper conductor are separable for the purpose of analyzing the competitive effect of the merger and (2) that aluminum conductor (bare and insulated) is therefore a submarket and for purposes of § 7 a "line of commerce."'

"What we are really finding in a line of commerce is an effective area of competition."

Preceding the above, the Opinion at page 724 states:

"Once the architect has settled on a design for curtain wall, if it is determined to be in metal, the competition is between the various metal suppliers and fabricators. If cost is a dominant factor, aluminum is usually specified over other metals because it is cheaper than stainless steel, carbon steel, corten steel or bronze.

"The metal fabricators who make curtain wall do not consider the precast concrete people to be their competitors. There is a separate trade association for metal, The National Association of Architectural Metal Manufacturers. The precast concrete suppliers are members of the Structural Clay Products Institute."

16. In the present proceeding the Executive Secretary since May 1949 of the Friction Materials Standards Institute, Inc., testified that its predecessor organization was known as the Clutch Facing and Brakelining Institute and prior to that as the Brakelining Manufacturers Association, Inc.[41] The witness testified that the Friction Materials Standards Institute, Inc. (FMSI) was primarily engaged in the standardization of sizes to facilitate any wanted interchange of the products of the various manufacturers for the same use application and further that the institute had an active membership of manufacturers of brakelining and clutch facing friction materials. Commission Exhibit No. 101, a current membership list, was submitted by the witness in such connection. Common to the list of active members of FMSI on Commission Exhibit No. 101 and the manufacturers listed on Commission Exhibit No. 65, prepared by the Marketing Research Department of the American Brake Shoe Company and dealing with the United States Market for Friction Materials by Manufacturers are the following manufacturers, of which nine were called as witnesses in this proceeding: All-O-Matic Manufacturing Corporation;[42] American Brake Shoe Company, American Brakeblok Division, and S.K. Wellman Division;[43] Bendix Corporation;[44] Borg-Warner

[41] Tr. 930-932.

[42] Tr. 1125-1139.

[43] Tr. 375-489; 498-585; 586-598; 1449-1588; 1772-1955; 3390-3480; 4006-4055; 4061-4105 (S.K. Wellman deposition); 4415-4466.

[44] Tr. 716-739; 1071-1117.

Corp.;[45] Carlisle Corporation;[46] Chrysler Corporation;[47] Firestone Tire & Rubber Company; Gatke Corporation; General Metals Powder Company;[48] General Motors Corporation;[49] H. Krasne Manufacturing Company; H. K. Porter Company, Inc.; Johns-Manville Corporation; L. J. Miley Company, Inc.; Raybestos-Manhattan, Inc.;[50] and Southern Friction Materials Company.

17. Manufacturers of friction material products, principally brakelining, clutch facings and transmission parts, advertise their products as being made from friction materials.[51] Raw materials suppliers recognize the existence of a friction materials industry as distinguished from other industries.[52] Manufacturers in the friction materials industry recognize each other as being competitors in the friction materials industry.[53] Manufacturers in other industries recognize the existence of a friction materials industry and that it is non-competitive with these other industries.[54] Mr. S. K. Wellman of the S. K. Wellman

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[45] Tr. 2146-2181.

[46] Tr. 1312-1328.

[47] Tr. 906-927; 3715-3750; 4263-4280.

[48] Tr. 743-761.

[49] Tr. 816-827; 3191-3266.

[50] Tr. 827-875; 877-905; 2976-3030.

[51] Comm. Ex. Nos. 95, 97, 98, 99.

[52] Comm. Ex. No. 111.

[53] Tr. 3021-3022.

[54] Tr. 3597 shows that manufacturers of automotive metal brake drums do not compete with manufacturers of automotive brakelining. Further, friction materials are considered to be a different product. At Tr. 3611-3612 the Executive Engineer of Budd Company, a major manufacturer of automotive metal brake drums purchasing brakelining from the American Brake Shoe Company, testified:

"Q. Now, in your industry what component is referred to as 'friction material'?

"A. The brake lining material."

Company testified that the common concept of a friction material would be brakelinings, clutch facings and transmission facings, although transmission facings would not be too well known by the ordinary layman. Mr. Wellman also testified that the S. K. Wellman Company belonged to the Friction Materials Standards Institute for a long time.[55]

18. American Brake Shoe Company recognizes friction materials to be a separate product line made by a specific Division of the company. Commission Exhibit No. 8, its 1963 Annual Report lists under Products and Divisions: **Friction Materials—American Brakeblok Products**, automotive, aircraft and industrial brakelining, friction discs and laminated plastics—Velvetouch Products, clutch plates, friction discs and heavy duty industrial brakelining. American Brake Shoe Company in listing its application to the New York Stock Exchange[56] on April 4, 1963 for the issuance of additional shares of common stock in connection with the acquisition of the assets of the S. K. Wellman Company had this to say: "The business of Wellman should supplement that of the Company in the manufacture and sale of friction materials for various braking and clutching applications and should improve its position to supply and service the markets where such applications are utilized."

19. Commission Exhibit No. 65, The American Brake Shoe Company Marketing Research Department document, entitled, The United States Market for Friction Materials, at page 2, is titled "Scope of Market for Friction Materials" and in the context of the three basic product classifications considered in the report, namely, brakelining, transmission parts and clutch facings, the following definition is given: "The *friction materials* included in the

[55] Tr. 4092-4093.

[56] Comm. Ex. No. 61, p. 1.

estimate of and definition of the market presented in this report *are* component machine *parts utilized to resist motion or to modify the force and direction of motion.*" (Italics supplied.)

Respondent would ignore this definition given in the context of these parts being brakelining, transmission parts and clutch facings, and seek refuge in its interpretation of a portion of the complaint's definition of friction materials which reads in full as follows: "'Friction materials' *are substances used to oppose the relative motion of two bodies in contact*, including but not limited to organic friction material, sintered metal friction material and paper friction material." (Italics supplied.)

20. Respondent would contend (Resp. Proposed Findings of Fact, pp. 194-196) that assuming the existence of a market for "friction materials" as set forth in the complaint[57] that this market must encompass not only these materials but other substances "used to oppose the relative motion of two bodies in contact" in brakes, clutches and transmissions. Acceptance of respondent's contention, repeated during the course of the oral argument on the proposed findings of fact, would lead to an unlimited and meaningless product market not limited to "friction materials" as they are commonly known, understood and accepted by the public and the trade concerned. This is well illustrated in footnote 54 on preceding page 18.

21. The following colloquy took place at Tr. 4657-4658 during the oral argument herein on July 15, 1966:

> "HEARING EXAMINER SCHRUP: Mr. Cunningham, I think I see what you are getting to. Are you going to the point that anything that opposes a friction mate-

[57] It is apparent that the friction materials definition used in the complaint was in part based on Comm. Ex. No. 65 supplied by respondent's counsel pursuant to Comm. Ex. No. 1, submitted under date of November 26, 1962, to the Federal Trade Commission for a pre-merger clearance.

rial is also considered in the friction material industry?

"MR. CUNNINGHAM: What I am going to say is that when these two plates, however made, come together, you have to count both plates in the market.

"HEARING EXAMINER SCHRUP: I see. I will ask you the same thing that I asked the Commission counsel this morning.

"The brakedrum on the passenger automobile, a steel brake drum—the friction material is applied to it. Do you consider the steel brake drum to be a friction material?

"MR. CUNNINGHAM: Yes, sir.

"HEARING EXAMINER SCHRUP: And would that be in the friction industry?

"MR. CUNNINGHAM: If there is a friction industry I don't contend there is.

"HEARING EXAMINER SCHRUP: Would you consider Budd to be a competitor of the Wellman and the American Brake Shoe Company?

"MR. CUNNINGHAM: In two senses. Budd has testified they are the leading producer of paper friction materials in the—

"HEARING EXAMINER SCHRUP: Let's not skip over to some other product. Let's stick with the steel drum.

"MR. CUNNINGHAM: It is steel, it is in the market.

"HEARING EXAMINER SCHRUP: Is Budd as the manufacturer of a steel drum a competitor of Wellman in making a brake lining?

"MR. CUNNINGHAM: In the sense that Wellman makes on opposing surface, and they are included in

the census prepared by Mr. Grandman on page 56 of his document.[58]

"HEARING EXAMINER SCHRUP: Practically everybody is in the friction material industry then?

"MR. CUNNINGHAM: If you produce a substance that opposes the relative motion of two bodies in contact—that is the complaint." [59]

22. The extent of respondent's attempts in support of its contention that "all substances used to oppose the relative motion of two bodies is contact" should be included in the friction materials market and submarket alleged in the complaint, is well illustrated by respondent's examination on voir dire of complaint counsel's witness,[60] the manager of the Wabash Division of Raybestos-Manhattan, Inc., the largest producer of friction materials in the industry.[61]

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[58] This census tabulation in complaint counsel's proposed findings of fact relates to the submarket production and sales of sintered metal friction materials by Brake Shoe's Cleveland, Ohio, plant, the acquired S. K. Wellman, Bedford, Ohio, plant, and the competitor companies on said tabulation. It is to be distinguished from Comm. Ex. 65 listing the friction materials market, the manufacturers selling therein and the production figures for the said market. As previously noted Comm. Ex. No. 65 was supplied by respondent's counsel pursuant to Comm. Ex. No. 1, submitted under date of November 26, 1962, to the Federal Trade Commission for a pre-merger clearance.

[59] See preceding Finding No. 19 and No. 37, page 33 following.

[60] At Tr. 849, the following question by respondent and answer by the witness appears:

"Q I note from glancing at your Annual Report that you produce some products of plastics. Are any of those friction materials or could they be used as thrust surfaces?

"A Let's see, one of them is bowling balls, and that would not be a friction material by any means. No. I don't think the plastics are such materials."

[61] Testified to later by the Chief Sales Engineer of Raybestos-Manhattan, Inc., at Tr. 3011.

This witness testified in response to questions by complaint counsel, that the Wabash plant had annual sales in the vicinity of $5,000,000 of sintered metal friction materials in the submarket of sintered metal friction materials alleged in the complaint.[62] The witness distinguished a sintered metal structural part from a sintered metal friction material. The sintered metal structural part was stated to be merely a powdered metal pressed together without any friction modifiers in the composition, and used mainly as a bearing, pinion gear or some mechanical part. A sintered metal friction material, on the other hand, was stated as being that which was used as a brake or clutch material.[63]

The witness recognized the competitors of the Wabash Division in the manufacture of sintered metal friction materials and enumerated them as being the respondent Brake Shoe and its S.K. Wellman Division, General Metals Powder Company, Friction Products Corporation, General Motors Moraine Division, and Bendix Corporation's Marshall Eclipse Division. The witness stated that he knew of no other manufacturers, even by hearsay, as being producers of sintered metal friction materials as that material was distinguished by the witness from sintered metal structural parts.[64]

23. Commission Exhibit No. 100 is a letter under date of April 19, 1965 from respondent's counsel replying to complaint counsel's request of respondent for all the known producers of "sintered metal friction materials.". This letter lists the following twenty-two named manufacturers believed by respondent to be either engaged in current production of "sintered metallic friction products" or to

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[62] Tr. 835-837. Raybestos-Manhattan has several plants engaged in the production of friction materials. Tr. 2993-2994.

[63] Tr. 858.

[64] Tr. 855.

have been so engaged in the recent past. Practically all of the following listed companies on this exhibit served as witnesses in this proceeding: Allied Sintering, Inc.;[65] American Brake Shoe Company;[66] American Powdered Metals, Inc.;[67] Asco Sintering Corp.;[68] Bendix Corporation, Marshall-Eclipse Division;[69] Chrysler Corporation, Amplex Division;[70] Compacted Metals Corp.;[71] Dixon Sintaloy,

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[65] Tr. 954-956. This witness testified that Allied Sintering, Inc. produced only sintered powdered metal parts and that he did not consider his company to be competing with the sintered metal friction materials produced by Brake Shoe or Wellman.

[66] The transcript reference to the lengthy testimony of Brake Shoe officials is set forth in footnote 43, supra. Brake Shoe's Cleveland, Ohio, plant and its S.K. Wellman, Bedford, Ohio, plant produce sintered metal friction materials.

[67] Tr. 1169-1180. The witness from American Powdered Metals, Inc. testified his company made sintered powdered metal parts and bearings but was not in the business of making sintered metal friction materials. The witness did not consider his company to be a competitor as regards sintered metal friction materials produced by either Wellman or Raybestos-Manhattan, Inc.

[68] Tr. 1251-1252. By stipulation it was agreed that Asco Sintering Corp. was primarily a producer of structural parts from powdered metal. They produce a large number of bearings and some thrust washers. The company had purchased the powdered metal fabricating business of Picco Industries, California. See footnote 83 following.

[69] The transcript reference to the testimony of Bendix Corporation officials is set forth in footnote 44, supra. Its Marshall-Eclipse Division produces sintered metal friction materials.

[70] The transcript reference to the testimony of Chrysler Corporation officials is set forth in footnote 47, supra. Its Amplex Division produces sintered metal friction materials.

[71] Tr. 969-976. The witness testified the business of Compacted Metals Corp. was in the sintered metal powder structural parts field. The witness did not consider his company to be a competitor as regards the sintered metal friction materials produced and sold by Brake Shoe and Wellman.

Inc., Subsidiary of Joseph Dixon Crucible Co.;[72] Eaton Manufacturing Co., Powdered Metals Division;[73] Emhart Corporation, Kwikset Powdered Metal Products;[74] Friction Products Company;[75] General Metals Powder Co.;[76] General Motors Corporation; Delco Moraine Division;[77] Graphite Metalizing Corporation;[78] International

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[72] Tr. 940-953. The witness testified that Dixon Sintalov, Inc. was mainly a producer of sintered powder metal parts, and that it produced a very limited amount of sintered metal friction material for use in motion picture projectors and the friction clutch in a chain saw. The witness did not consider his company a competitor of Brake Shoe or Wellman, and testified it would need larger machinery, larger presses and a different type of sintering equipment to enter into any such competition.

[73] Tr. 1199-1233. The witness testified the Powdered Metals Division primarily made sintered metal structural parts. The division did not consider itself a competitor as regards sintered metal friction materials made by Brake Shoe and Wellman.

[74] Tr. 1184-1199. Kwikset Powdered Metal Products manufactures a variety of sintered powder metal parts, not sintered metal friction materials as produced by Brake Shoe and Wellman. Some of the division's parts were used as clutch shoes in chain saws, the end use of other of the parts made by Kwikset were unknown to the witness.

[75] The transcript reference to the testimony from Friction Products Company is Tr. 762-813. This company produces some sintered metal friction materials.

[76] The transcript reference to the testimony from General Metals Powder Co. is Tr. 743-761. This company makes sintered metal friction materials.

[77] The transcript reference to the testimony of General Motors Corporation officials is set forth in footnote 49, supra. The Delco Moraine Division produces sintered metal friction materials.

[78] Tr. 858-968. The witness testified that 90% of Graphite Metalizing Corporation's products were self-lubricating bearings and that the company did not consider itself a competitor of Brake Shoe or Wellman. According to the witness, to enter into such competition would cost the company a great deal of money which it did not have.

Powder Metallurgy Co., Inc.;[79] Johnson Bronze Company, Ferraloy, Inc.;[80] R.G. Le Tourneau & Co.;[81] National Molded Products, Inc.;[82] Picco Industries;[83] Powdercraft

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[79] Tr. 1252-1304. The witness testified International Powder Metallurgy Co., Inc. made powdered metal parts that are considered bearings and structural parts, filters, tungsten parts, and electrodes. The company made metal pressure plates for automatic transmissions which operate against friction materials. The witness does not refer to these sintered operating parts as friction parts or friction materials (Tr. 1291). The company does not manufacture and sell sintered metal friction materials as made and sold by Brake Shoe and Wellman, but has made some in the company laboratory.

[80] Tr. 982-1012. The witness testified that Ferraloy, Inc. had not manufactured the type of sintered metal friction materials made by Brake Shoe and Wellman since late in 1940 when Ferraloy gave it up. To produce such friction material, Ferraloy would have to acquire additional equipment, and to sell in any volume, would have to make a change in its sales force. The company makes sintered metal parts for automatic transmissions, automatic washer clutches and other parts to "oppose the relative motion of two bodies in contact."

[81] The transcript reference to the testimony concerning R.G. Le Tourneau & Co. is Tr. 1143-1169. This company has produced sintered metal friction materials.

[82] Tr. 1013-1018. The witness testified National Molded Products, Inc. makes sintered powder metals parts, not friction materials. The company does not consider itself a competitor of Brake Shoe and Wellman.

[83] As regards Picco Industries, see footnote 68, supra.

Corporation;[84] Powder Metal Products Co.;[85] and Raybestos-Manhattan, Inc.[86]

"24. With regard to the above-named manufacturers, the Division Manager of the Wabash Division of Raybestos-Manhattan, Inc., testified that in the course of his duties he had never met in the marketplace with Allied Sintering, Inc.; American Powdered Metals, Inc.; Compacted Metals Corp.; Asco Sintering Corp.; Dixon Sintaloy, Inc.; the Emhart Corporation; International Powder Metallurgy Co.; Picco Industries Co.; Powder Metal Products Co.; National Molded Products, Inc.; Graphite Metalizing Corporation; Ferraloy, Inc.; and Powdercraft Corporation. That he did not recognize them as being producers of sintered metal friction materials, but as to some they were makers of sintered metal structural parts to the best of his knowledge. The witness stated that he had heard of the Eaton Manufacturing Co., but not in the sintered metal business, and the Amplex Division of Chrys-

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[84] Tr. 1019-1068. The witness from Powdercraft Corporation testified he was formerly employed in the structural powdered metal division of S.K. Wellman Company before this division was sold by Wellman to Ferraloy, Inc., a subsidiary of Johnson Bronze Company. The witness stated his company to make sintered metal structural parts, bearings, filters, and some sintered metal friction parts. According to the witness the company does not normally manufacture sintered metal friction materials like that made by S.K. Wellman Company but has made some.

[85] Tr. 977-980. The product manager of Powder Metal Products Co. testified that they made sintered powder structural metal parts, and that he knew nothing about either Brake Shoe or Wellman as being competitors of his company's products.

[86] The lengthy transcript reference to the testimony of Raybestos-Manhattan, Inc. officials is set forth in footnote 50, supra. Raybestos-Manhattan, Inc. produces sintered metal friction materials.

ler Corporation, but in structural parts, not in sintered metal friction materials.[87]

25. The Chief Sales Engineer of Raybestos-Manhattan, Inc. served as a witness for respondent Brake Shoe. This witness testified that the two chief competitors of his company in the sale of sintered metal friction materials were Brake Shoe and Wellman, and that he knew of no other manufacturers that he would consider to be competitors of his company in the sale of sintered metal friction materials.[88]

26. The preponderance of the testimony and evidence adduced in this proceeding is directed to the complaint's allegations that in the product market for friction materials there exists a submarket of sintered metal friction materials. Sintered metal friction materials in the form of brakelining, clutch facings and transmission parts are the main products of Brake Shoe's Cleveland, Ohio, plant and the acquired S. K. Wellman, Bedford, Ohio, plant.[89] Organic friction materials in the form of brakelining, clutch facings and transmission parts are the main products produced at Brake Shoe's Winchester, Virginia, plant. Brake Shoe's Winchester plant did not have the facilities and was not capable of any production of sintered metal friction materials at the time of the acquisition of Wellman by Brake Shoe.[90]

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[87] Tr. 855-857.

[88] Tr. 2976.

[89] See preceding Finding No. 5, supra.

[90] The record at Tr. 524 discloses the following testimony by Mr. M.B. Terry, President of the American Brakeblok Division of American Brake Shoe Company:

> "HEARING EXAMINER SCHRUP: During the lull, I have a question that occurred to me that I would like to ask you. Prior to the merger, could the products that were made by the Wellman Company be manufactured at the Brake Shoe Winchester plant?
>
> "THE WITNESS: No."

27. Prior to the acquisition of the Cleveland, Ohio, plant Brake Shoe had been producing sintered metal friction materials at its plant in Hillburn, New York. The capacity of this plant was considered inadequate to make a "real entry" into what it foresaw as a growing market for these materials. Brake Shoe, accordingly, in 1954 for $742,742 cash, purchased its present Cleveland plant from the Metallic Friction Material Company, a manufacturer then engaged in the production of sintered metal friction materials.[91] Brake Shoe at the time of the purchase of this plant recognized the differences existing between the production for sale of sintered metal products and the production for sale of sintered metal friction materials, and it therefore exacted from the Cleveland plant seller an agreement not to compete in the field of sintered metal friction materials for a period of four years.[92]

28. Brake Shoe also realized this Cleveland plant acquisition to be the means of making any substantial penetration of the existing sintered metal friction materials market much earlier than the alternative posed of expanding its Hillburn, New York, plant facilities. This acquisition alternative was again seized upon by Brake Shoe in 1963 to bring about a near, if not commanding position, in the sintered metal friction materials market by the acquisition of the S.K. Wellman Company.[93] Growth by acquisition, rather than the expanding of its own potentialities of growth from within, was not novel to Brake Shoe as is shown by Commission Exhibit No. 82 entitled, United States Acquisitions by Company in Fields other than Friction Materials. This document, supplied by Brake Shoe

[91] Comm. Ex. No. 1-N (page 13); Tr. 384-386; 505; 594-596.

[92] Tr. 763 and oral argument at Tr. 4601-4602; 4625. Witness now operates Friction Products Corp. Comm. Ex. No. 91 shows this company to be a very small seller of sintered metal friction materials.

[93] Tr. 475-476.

under its pre-merger clearance request to the Federal Trade Commission, shows 17 acquisitions by Brake Shoe during the time period 1943-1962.

29. Brake Shoe admittedly grew by what it terms "planned acquisition." Commission Exhibit No. 60 is a printed document of an address by the President, American Brake Shoe Company, to the New York Society of Security Analysts on November 1, 1957. This address deals with Brake Shoe's growth by planned acquisition. For example, in this document at page 3, it is stated, "We established a strong position in the fast-growing hydraulics field through the acquisition in 1955 of the Denison Engineering Company"—and at page 6, "Denison gave us a leading position in this field which we intend to expand."

30. In connection with the instant acquisition of the S.K. Wellman Company, the record shows Brake Shoe's market position to have been substantially augmented in several product categories. Sintered metal friction material products principally in the form of automotive transmission parts, together with some clutch facings were being produced in Brake Shoe's Cleveland, Ohio, plant. In the industrial or non-automotive field the principal product of this plant was sintered metal friction material brakelining, with clutch facings and transmission parts next in order. In Brake Shoe's acquired S.K. Wellman Bedford, Ohio, plant the principal sintered metal material products produced in the automotive field were clutch facings, with brakelining and transmission parts next in order. In the industrial or non-automotive field, sintered metal friction material clutch facings[94] were by far the most significant

[94] Mr. Thomas Cox, Vice-President and Director of Research and Development at Wellman from 1949 until 1960, testified to the following at Tr. 3419-3420:

"HEARING EXAMINER SCHRUP: Mr. Cox, when you were with the S.K. Wellman Company, did you have any so-called bread and butter friction material?

"THE WITNESS: Yes, we had which we regarded as our

product, with substantial production of transmission parts and brakelining following.[95]

31. Sintered metal friction materials are defined in the complaint as being those produced by blending various metal and non-metallic powders. These ingredients are stated to be then compressed and sintered to a steel or other backing under high pressure and temperature.[96] Commission Exhibit No. 17, entitled American Brakeblok Friction Material for Industrial Equipment, at page 2, states as follows:

"Sintered Metal Friction Material

"Metallic Friction materials are produced by blending various metallic and non-metallic powders. The ingredients are compressed and sintered to a steel backing under pressure and high temperatures.

"American Brakeblok sintered metal friction materials for clutch and brake application are intended to supplement organic friction materials but not to re-

bread and butter, and that was our original friction material that we made for bulldozers, earthmoving machinery.

"Hearing Examiner Schrup: What would be the application in that particular machinery?

"The Witness: Well, that was a multiple disc clutch that went on the endless track on the side of the tractor. There was one clutch on either side. The tractors are steered by disengaging the clutch on either side. The operator has two handles that he pulls."

[95] See the tabulation in preceding Finding No. 5 herein.

[96] Resp. Answer, Par. 1, admits this definition to be substantially correct but subject to clarification and refinement. During the course of the instant hearing it was developed that some manufacturers in the production of this friction material for certain applications deviate from both the complaint's definition, and the Brake Shoe and Wellman definitions set forth in Comm. Ex. Nos. 17 and 27 above and Comm. Ex. No. 20 in Finding No. 33 following.

place them. Under severe operating conditions, metallic facings assure longer life."

The exhibit further states that this manufacturing division of Brake Shoe has for many years supplied friction materials to industrial equipment manufacturers for both original equipment and replacement use. These friction materials are stated to include products for power shovels, hoists, graders, power take-off units, dozers, farm tractors and machinery. The exhibit at page 3, entitled Description Guide for Brake and Clutch, contains a glossary of industry terms for the various applications used.

32. Various of the S. K. Wellman product catalogs are also exhibits of record in this proceeding. Commission Exhibit No. 27, for example, dealing with products for trucks, tractors, trailers, construction and off-highway industrial equipment, states:

> "Velvetouch Feramic Brake Blocks are made of sintered iron powders fused directly to solid steel backing plates. They were developed by The S. K. Wellman Company, pioneer of every major improvement in the highly specialized field of metallic friction materials."

33. Commission Exhibit No. 20 dealing with all-metal clutch plates, facings, matched facing sets and brake-linings for tractor and industrial equipment, represents the Wellman Velvetouch products to last longer and, further, that "unlike ordinary asbestos or semi-metallic friction products, genuine Velvetouch is made from powdered metals formed under tremendous pressures and fused with a solid steel backing." Features that Wellman stressed include "extra service life", "smooth positive performance", "uniform action" as "friction efficiency is constant month after month . . . because metal does not deteriorate like conventional materials" and . . . "low cost" for when

"measured in added service and work performed all-metal construction costs less than ordinary friction material."[97]

34. The sintered metal friction material of the S.K. Wellman Company was aimed at "the heavy duty, high energy field".[98] The heavy duty advantages of Wellman's sintered metallic friction material are emphasized in all Wellman catalogs. For example, in Commission Exhibit No. 20, at page 265, in the section devoted to mining, the following appears:

> "Wherever operating conditions are extremely severe . . . and absolute dependability essential . . . there's where you will find Velvetouch all-metal clutch plates, facings and brake linings doing a better job. . . . and at a lower cost per ton mined. That's why experienced engineers and maintenance men specify genuine Velvetouch. They know, from past performance, that Velvetouch lasts longer . . . requires fewer adjustments . . . provides that extra margin of safety found only in all-metal construction.
>
> "Unlike ordinary asbestos or semi-metallic friction products Velvetouch is made from powdered metals, formed under tremendous pressures and fused with a solid steel backing."

35. The chief engineer of the Racine Works of the Twin Disc Clutch Company, a large clutch manufacturer, is a substantial purchaser of both organic and sintered metal friction materials. This witness testified in part as follows in response to a question as to the various compositions available for twin disc clutch assemblies:

"THE WITNESS: In general, then, there are molded asbestos compositions, copper based sintered metal

[97] Comm. Ex. No. 20, p. 2.

[98] Testimony of the former President of the S.K. Wellman Company at Tr. 615.

compositions, iron based sintered metal compositions, homogeneous materials such as bronze, phosphor bronze, sometimes steel upon steel—rarely so. There are cellulose fiber compounds, quite often called Krayfelt by name, sometimes cork. The mating surfaces usually are then steel, iron of various grades, sometimes aluminum."[99]

The witness further testified in part as follows:

"Q. Isn't it true that generally speaking, you use largely the organic and sintered metal friction material for most of your friction material application?

"A. Yes.

"Q. Then the use of materials such as phosphor bronze and steel on steel would be a minor portion of use of friction materials?

"A. Yes, and that is because the technological advances have, in the main, given us more desirable features in the asbestos and sintered metal group than in the older application group of phosphor bronze on steel.

"HEARING EXAMINER SCHRUP: You were saying something about past history?

"THE WITNESS: Yes, in past history, the friction materials started as wood on a ferrous surface, then leather on a ferrous surface. Then we progressed upward to the more heat and wear resistant materials of molded asbestos and the sintered metals we're talking about today.

"By Mr. Grundman:

"Q. Why do you use the organic or molded asbestos and the sintered metal? Why don't you specialize further and just limit yourself to either one or the other?

[99] Tr. 2028-2030.

[32] "A. Each has its distinct advantage and in the case of the dry clutch, the molded asbestos is desired because of lower cost, equal or better wear resistance in most cases to the copper base sintered metal. It has in certain usage areas the peculiar property of giving off a foul odor when abused to warn the operator that he has gone too far in his use of it. Those are the primary advantages of the asbestos material.

"Q. Now, how about the advantages of the sintered metal friction material?

"A. The sintered metals can operate at temperatures well above the temperatures of asbestos, because the material used to bind the asbestos as of today generally break down around six or seven hundred degree Fahrenheit. The water of hydration is driven out of asbestos. Water hydration is the way I know it. I may not have the very correct technical term. It breaks out of asbestos and it becomes a powder instead of a structure member at around 750 degrees Fahrenheit.

"So the previously mentioned flash heats tend to destroy that skin surface of asbestos and thus erode, wear away those plates quite rapidly. Yet the sintered metals do not suffer such rapid damage at those elevated temperatures.

"The strength of sintered metals quite often is another advantage in that the carrying core is steel, which could easily be 30,000 psi tensile strength as compared to only 6,000 for asbestos. If the application can use such differences in strength, it is an advantage." [100]

36. Commission Exhibit No. 59 is a Brake Shoe brochure entitled, Metal Trends, which is descriptive of its

[100] Tr. 2071-2072.

Cleveland, Ohio plant. At page 59c, among other matters, the following appears:

> "American Brakeblok's Cleveland plant where sintered metal friction materials are made is no mere aggregation of presses and ovens. An interesting characteristic of the manufacture of metallic friction materials is the highly individual treatment of each unit produced. This is true despite the fact that production is on a high-volume basis. Careful control over every phase from powder to packaging, stamps each unit with the imprint of unvarying high quality.
>
> "The maintenance of this reputation for quality which American Brakeblok has enjoyed for over 25 years is the result of close coordination between research and operating people. In the lab and in the plant you find men who display intimate knowledge of the phenomenon of friction and a realistic consideration of the limitations of design.
>
> "Their job is to tame motion with engineered friction in a world of higher speeds, higher temperatures and heavier loads."

37. Commission Exhibit No. 9, at page 124, is entitled, Sintered-Metal Friction Materials, and is authored by the Manager, Sintermet Products Development, American Brake Shoe Company, Mahway, New Jersey, the home of Brake Shoe's research laboratory. This document contains a detailed technical description of the manufacturing processes and the varied powder compositions and capabilities of sintered metal friction materials, their elevated temperature properties and other qualities. Table 1 in said document shows what is stated to be the powder composition and weight by percentage of a typical sintered metal friction material. This table reads 68% copper, 8% tin, 7% lead, 6% graphite, 4% silica, and 7% iron. The manufacturing methods used in the production of sintered

metal friction materials, the bonding technique, the mechanical properties, temperature resistance and operating characteristics of these friction materials are also described in the said document. "Mating surfaces" are stated to be "the type of material used in the surfaces against which friction materials operate." See preceding Finding No. 20 at page 19, supra.

38. Dr. Benjamin T. Collins, Director of Research and Product Development of the Wabash Division of Raybestos-Manhattan, Inc., described at length the many engineering, technical skills and elaborate facilities necessary to the manufacture of sintered metal friction materials in any appreciable volume. Dr. Collins also distinguished the manufacturing processes and the powder compositions of sintered metal friction materials from those employed in other sintered metal products such as, for example, sintered metal structural parts. Dr. Collins explained the necessary friction characteristics given by the powder compositions used in sintered metal friction materials and absent in other sintered metal products.[101]

39. The President of the Hoeganaes Sponge Iron Corporation testified "We are the largest suppliers of iron and alloy powders in the industry—in the world." This witness, in response to a question, further testified that his company sold certain powders to American Brake Shoe and S.K. Wellman and described the end products that would be made from these powders as follows:

> "THE WITNESSES: From just our general knowledge of the trade, we can exclude seals and bushings and other structural parts, and we can safely conclude that the powders that we sell go into friction compositions."[102]

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[101] Tr. 877-905.

[102] Tr. 2405; 2393.

40. The difference between the sintered metallic friction materials manufactured by S.K. Wellman and American Brake Shoe and powdered metal parts from the viewpoint of a parts manufacturer is illustrated in the testimony of the witness from American Powdered Metals Company. This witness testified that his company does not make sintered metallic friction materials but rather makes powdered metal parts which are essentially 100% metallic powder. The witness was once approached by a customer to make a sintered metal friction material, but the customer was turned down and advised that the company's operation was not conducive to manufacturing this type of product. The customer was referred to Raybestos-Manhattan, Inc., a producer of sintered metal friction material.[103]

41. Powdered metal parts manufacturers manufacture pieces that sometimes are used with a friction function. Probably the most common example of this referred to in the record is the clutch shoe used in a centrifugal clutch on a chain saw. The clutch shoe is a solid one-piece construction with high tensile strength in the material itself. Its composition would be virtually all metal. A manufacturer of the centrifugal clutch shoe for chain saws stated that he considers these to be structural parts.[104]

42. Some parts manufacturers refer to parts such as the centrifugal clutch shoe or thrust washers as "friction materials" or "friction parts" but recognize that the sintered metal friction materials manufactured by Wellman and American Brake Shoe are wholly different.[105] Manufacturers of centrifugal clutch shoes, thrust washers and the like do not consider themselves to be competitors of the sintered metal friction material produced by Wellman and Brake Shoe. A sintered metal friction material manu-

[103] Tr. 1170-1171.

[104] Tr. 1196-1198.

[105] Tr. 943; 1032, 1049, 1058; 1059.

facturer would not consider an item such as a thrust washer as a "friction material".[106]

43. A powdered metal structural parts manufacturer in order to produce sintered metal friction materials of the type manufactured by Wellman and American Brake Shoe would need larger machinery, larger presses and a different type of sintering equipment.[107] Respondent would appear to recognize this and implicitly admit the existence of a submarket restricted to sintered metal friction materials as alleged in the complaint when it undertook to question its witness, the President of the Hoeganaes Sponge Iron Corporation, about the "ease of entry" into such submarket by a powdered metal structural fabricator[108] attempting to both produce and sell in the field of sintered metal friction materials. The following is shown at Tr. 2401-2403:

> "Q. Mr. Gummeson, what would be your best estimate of the cost of establishing a minimum facility for the production of powdered metal friction components?
>
> "A. Well, again, on the assumption that you start from scratch, and shall we say not counting necessary working capital, which is intended to keep you alive while you install, I don't think that it is advisable to go into this business with less than $200,000 or thereabouts, and the figure may vary very widely depending upon how willing and capable you are of building or modifying your own equipment, or whether you have enough capital to go out and buy the best.
>
> "Q. In your opinion, it would be possible to build your own presses and furnaces?

[106] Tr. 882; 943; 955-956.

[107] Tr. 944.

[108] See preliminary discussion at Tr. 2400; compare S. K. Wellman Company experience at Tr. 4099-4101.

"A. This is frequently done; very frequently done.

"Q. Suppose, sir, that I am already engaged in the production of, let us say, sintered metal bearings. What is your best estimate of my ability to enter into the production of sintered metal friction components as to cost?

"A. This again would depend on whether you are a corporate giant or whether you are a small, struggling parts fabricator. A large fabricator, a large corporation, is not very likely to start out with homemade equipment and on a small scale; he is more apt to make a large investment from the beginning and his investment may very well start out as a quarter of a million dollars. But basically speaking, it must be easier for a parts fabricator to enter the field than a complete newcomer.

"And I would think that in many cases, starting out in the friction materials field, once you are in parts making, it is more a question of devoting sums for the development work than it is to building new equipment or new plants.

"It is hard to say, really. I would—I think as a fabricator, having never made structural parts, I would hate to go into it without being able to lose $40,000 or $50,000.

"Hearing Examiner Schrup: Well, there is another intangible present there, it would seem to me, and you can't from your business experience tell us, when you talk about the production facilities, the cost of obtaining them, the other intangible is securing customers for the product once it is made.

[37] "The Witness: Indeed.

"Hearing Examiner Schrup: That may be a problem to a newcomer.

"The Witness: Right, then, on the one hand of the spectrum, all you accomplish is to duplicate what someone else is doing, which is very simple, versus coming

with something entirely new that is superior to everybody else's product. My answer was not formulated considering those factors, which I want to make clear."

Appropriate here is the following from the Commission's Opinion of May 25, 1965 in the *Ewachauf Trailer Company* matter, Docket No. 6608:

"While many firms may be able to enter the business on a very small scale, few indeed can attain a position substantial enough to offer a meaningful challenge to respondent."

44. American Brake Shoe Company's Service Division catalog [109] has this to say, among other things:

"Velvetouch Metalik is the World's Best and Safest Brake Lining for Passenger Cars. It is manufactured by The S.K. Wellman Company, the world's largest producer of all-metal clutch plates, facings and brake linings."

Further, the catalog states that Velvetouch Metalik:

"Eliminates Price Competition

"Velvetouch Metalik is the only all-metal brake lining now available in the replacement market. Because it is completely different from any other lining, it has no real price competition.

"You can sell Velvetouch Metalik at full list price . . . and make your full profit."

45. The technology and unique production facilities required in the manufacture of sintered metal friction materials set them apart from organic friction materials.[110]

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[109] Comm. Ex. No. 31, published by S. K. Wellman under copyright in 1961.

[110] See previous Findings Nos. 26, 36, 37, 38, 43; Tr. 719; 1321; 2981.

Where the intended application dictates the need or where their use is economically more advantageous, sintered metal friction materials commonly command a premium price and are more or less insulated from price competition with organic friction materials.[111] While sintered metal friction materials and organic friction materials are interchangeable in a considerable number of applications, this does not act to bar a finding that sintered metal friction materials comprise a valid submarket as alleged in the complaint.

46. In *United States v. Bethlehem Steel Corporation*, 168 F. Supp. 577, at 593, footnote 36, the Court had this to say as to the substitute product or interchangeability test in determining a line of commerce:

> "It should be noted that the basic issue in the Cellophane case was that of monopoly power and the Supreme Court expressly limited the market definition there to the monopolization clause of § 2 of the Sherman Act. There is a basic distinction between § 2 of the Sherman Act and § 7 of the Clayton Act. Further, monopoly power was defined by the Supreme Court in the Cellophane case as 'the power to control prices or exclude competition'. Obviously, when the question is power over price, substitute products may be relevant because they can limit that power. The issue under § 7 of the Clayton Act is not whether a merger may result in a company having power over price or the power to exclude competition. The issue under § 7 is whether there is a reasonable probability of substantial lessening of competition. There can be a substantial lessening of competition with respect to a product whether or not there are reasonably interchangeable substitutes. The merger of two producers

[111] Tr. 528-529; 560-564; 642-649; 865; 895; 1136; 1321; 2061-62; 2331; 2494-2495; 2786; 2829; 3767-3769; 4096.

of a product may substantially lessen competition or tend to create a monopoly in the market for that product even though it does not substantially lessen competition or tend to create a monopoly in the broader market embracing all the products which are reasonably interchangeable with that product."

47. Based on the testimony and the evidence of record and the preceding findings of fact, the hearing examiner finds that the preponderance of the probative and substantial credible evidence in this proceeding shows friction materials, as alleged in the complaint, to be a commercially significant line of commerce and a meaningful relevant product market, and that within such market, there is also a commercially significant line of commerce and a meaningful relevant product submarket of sintered metal friction materials.

IV. *The Competitive Effect*

48. In assessing the competitive effect of Brake Shoe's acquisition of Wellman, it becomes necessary as a starting point to observe the admonition of the United States Supreme Court in the *Brown Shoe* case:[12]

> "A company's history of expansion through mergers presents a different economic picture than a history of expansion through unilateral growth. Internal expansion is more likely to be the result of increased demand for the company's products and is more likely

[12] *Brown Shoe Co.* v. *United States*, 370 U.S. 294, at 345, footnote 72. At pages 343-344 of the Opinion, the Court states that the market share which companies may control by merging is one of the most important factors to be considered when determining the probable effects of the combination on effective competition in the relevant market. The Court added in the *Brown Shoe* case, that if a merger achieving 5% were to be there approved, the Court might be required to approve future merger efforts by Brown's competitors seeking similar market shares.

to provide increased investment in plants, more jobs and greater output. Conversely, expansion through merger is more likely to reduce available consumer choice while providing no increase in industry capacity, jobs or output. It was for these reasons, among others, Congress expressed its disapproval of successive acquisitions. Section 7 was enacted to prevent even small mergers that added to concentration in an industry."

49. Commission Exhibit No. 1 is a submittal under date of November 26, 1962, by respondent's counsel to the Federal Trade Commission requesting an advisory opinion as to the legality of the proposed merger of American Brake Shoe Company and the S.K. Wellman Company. The submittal consisted of the answers of each company to Commission questionnaires requiring information pertinent to the proposed merger. Question 17 of each questionnaire asked Brake Shoe and Wellman to provide for the past 5 years the annual market universe figures (total production of all manufacturers and the dollar value thereof) for each of Brake Shoe's and Wellman's principal products or product lines and the source of the data provided. Question 18 of each questionnaire asked Brake Shoe and Wellman to list in order of their importance, the 10 principal competitors of Brake Shoe and Wellman on these principal products or product lines, and to estimate the annual share of the market universe for these products or product lines obtained by each of these 10 principal competitors of Brake Shoe and Wellman.

50. The response by Brake Shoe to the Commission questionnaire is in evidence as Commission Exhibit No. 65. The response by Wellman to the Commission questionnaire is in evidence as Respondent's Exhibit No. 162. Neither exhibit covers the requested time period of 5 years prior to their submittal. Respondent's Exhibit No. 162 prepared by Wellman covers only the year 1961 and its answers to

questions 17 and 18 state, that information for prior years is not available to the company.[113] Commission Exhibit No. 65 prepared by Brake Shoe covers the years 1960, 1961 and 1962 (estimated). Brake Shoe's answer to question 17 at page 9 of the questionnaire reads as follows:

> "The requested information for 1960, 1961 and 1962 (estimated) is set forth on pages 4 through 8 of Exhibit 6B. The Company has been unable to assemble comparable reliable information for years prior to 1960. The reason is that surveys made in 1960 are considered reliable and in the light of subsequent experience afforded a basis for projecting forward but it would involve unwarranted speculation to attempt to reconstruct 1959 and earlier data. See page one of Exhibit 6B." [114]

Brake Shoe's answer to question 18 at page 9 of the questionnaire reads as follows:

> "The requested information for 1960 and 1961 is set forth on pages 5 and 6 of Exhibit 6B. The Company has been unable to assemble comparable reliable information for years prior to 1960 for the same reasons given in answer to Question 17."

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[113] Neither party places any reliance on the universe figures in Resp. Ex. No. 162. Respondent introduced it to show the disparity between the universe figures in Resp. Ex. No. 162 compared to those in Comm. Ex. No. 65 submitted by complaint counsel. Respondent disavows the universe figures in both exhibits. These two exhibits cover the market production of both organic friction materials and sintered metal friction materials, and are not to be confused with the tabulation in complaint counsel's Proposed Findings of Fact relating solely to the submarket for sintered metal friction materials.

[114] Brake Shoe Exhibit 6B is now Comm. Ex. No. 65 in this proceeding.

51. Question 28 of the questionnaire, at page 19, asked Brake Shoe to state its reasons for wishing to effect the proposed acquisition. At page 21 of the questionnaire, Brake Shoe states, in part, as follows in response to this question:

> "In the field of friction materials American Brake Shoe has been a producer in the United States since 1926. It also has facilities in Canada, Mexico and France as well as license arrangements in other countries. During the past year, and more particularly during the past two months, the Company's position in this field in the United States has been the subject of concentrated study. This study has given the Company a more accurate view of the friction materials market and has demonstrated that the Company has been unable to keep pace with the growth enjoyed by its larger competitors."

52. Commission Exhibit No. 65 dated November 10, 1962, and prepared by the American Brake Shoe Company Marketing Research Department, discloses in part as follows at page 9:

> "Method of Determining the Market for Friction Materials in the United States
>
> "The total market for friction materials in the United States for the year 1960 is estimated to aggregate $155,473,000. This market is summarized in the following table by the principal product lines comprising the market:

	Total	Automotive	Non-Automotive
Brakelining	$ 83,613,000	$ 61,510,000	$22,103,000
Transmission parts	33,586,000	29,427,000	4,159,000
Clutch facings	38,274,000	11,543,000	26,731,000
Total	$155,473,000	$102,480,000	$52,993,000"

53. Commission Exhibit No. 65 at page 5, contains an extended tabulation. This tabulation shows 32 manufacturers as being in the production of brakelining, transmission parts, and clutch facings in the friction materials market during 1960. In brakelining, according to respondent's estimate of total sales of all friction material of $155,473,000 for 1960, the exhibit shows 28 manufacturers to account for $83,613,000 in brakelining sales and of this total, $61,510,000 was in the automotive field, and $22,103,000 in the non-automotive field. Only 10 manufacturers engaged in the sale of transmission parts in the total amount of $33,586,000 of which $29,427,000 was in the automotive field. In the non-automotive field, there were only 5 manufacturers who accounted for $4,159,000. In clutch facings, the exhibit shows a turnabout, in that 14 manufacturers account for $38,274,000 of sales of which $26,731,000 was in the non-automotive field compared to $11,543,000 in the automotive field.

54. Brake Shoe's $9,982,000 sales of brakelining and 11.9% of the market shows $8,204,000 of this to be in the automotive field and $1,778,000 in the non-automotive field. In transmission parts a total of $1,040,000 in sales and 3.1% of the market shows $830,000 of this in sales to be for the automotive field and $210,000 for the non-automotive field. In clutch facings, out of a total of $769,000 and 2% of the market, $761,000 is in the non-automotive field.

A like tabulation compiled for Wellman would further show as to brakelining sales of $1,289,000 and 1.5% of the market, that $730,000 was in the non-automotive field and $559,000 in the automotive field. In transmission parts sales of $2,143,000 and 6.4% of the market, $1,508,000 was in the non-automotive field and $635,000 in the automotive field. In clutch facings with $7,034,000 of sales, Wellman soars to 18.4% of the market. This amount was divided with $5,976,000 of it being in the non-automotive field and $1,058,000 in the automotive field.

55. A condensation of Commission Exhibit No. 65, at page 8 for the year 1960, shows in part as follows with relation to preceding Findings Nos. 52, 53 and 54:

Summary of ABS and SKW Share of the United States Market for Friction Materials Based on Manufacturers' Selling Prices Year 1960

	Total Market	ABS Share % of Market	SKW Share % of Market	Combined Share % of Market
Total Friction Materials	$155,473,000[a]	7.6%	6.7%	14.3%
Brakelining	83,613,000	11.9	1.5	13.4
Transmission Parts	33,586,000	3.1	6.4	9.5
Clutch Facings	38,274,000	2.0	18.4	20.4

56. Respondent, following the issuance of the complaint in this proceeding, seeks to now disavow its pre-merger submittal under date of November 26, 1962, to the Federal Trade Commission as described in preceding Findings Nos. 49, 50 and 51, with respect to Commission Exhibit No. 65, and the friction materials market picture shown in preceding Findings Nos. 52, 53, 54 and 55. Respondent has taken this position prior to and during the course of the hearing and re-emphasized this position during the course of the oral argument herein on July 15, 1966.[115]

Appropriate to the situation here present is the following from the Commission's opinion of December 16, 1960 in *Pillsbury Mills, Inc.*, 57 Federal Trade Commission Decisions 1274, at 1394, with relation to a submittal of pre-merger figures to the Commission:

"We recognize that the statistical data in these letters are at most estimates. But this does not mean that they lack probative worth. Even though they

[115] Tr. 4612-4615; 4653-4654.

might be comparatively rough estimates, such as a businessman might rely upon in making decisions in the usual course, they are valuable in a case of this character. In a Section 7 proceeding it is not essential that market positions be ascertained with absolute mathematical precision. Reliable, probative evidence demonstrating the unreliability of the Mintener statistics would, of course, destroy their probative value, but no evidence of record rises to that dignity.

"The possibility that the Mintener letters may not have listed all important competitors is not greatly significant. Any such gaps that may have existed have been filled by other evidence. In passing upon the correctness of the examiner's conclusions on market structure it must be remembered that his findings were not premised solely upon the data in the Mintener letters. Other evidence figuring prominently in the findings includes the Commission surveys and the testimony of various competitors. In these circumstances we cannot say that the examiner gave undue weight to the Mintener letters. We sustain his assessment of their probative value."

57. The hearing examiner is placing no reliance on the accuracy of the estimated universe and the estimated sales figures of the various companies set forth as competitors of Brake Shoe and Wellman in Commission Exhibit No. 65. This exhibit, however, is not being regarded as a meaningless gesture on the part of the Marketing Research Department of the American Brake Shoe Company and respondent would be expected to put its best foot forward in applying for a pre-merger clearance.[116]

[116] A witness from the Bendix Corporation, ranked number 2 in Comm. Ex. No. 65, stated respondent's estimate for his company's sales to be high (Tr. 1108-1109). Preceding Finding No. 7 shows that when the proposed merger was submitted to the Board of Directors of Brake Shoe, the friction materials market was stated as being about $100 million.

Commission Exhibit No. 65 was submitted to the Commission by Brake Shoe as being sufficiently reliable to ask that official Commission action be based upon it. The document was prepared by experienced personnel with an industry background and presents a perspective of the friction materials industry as seen through the industry-informed eyes of the respondent. Brake Shoe, as a major manufacturer in the friction materials industry, would know its principal competitors in the sale of friction materials although it might be mistaken in its estimates as to the actual dollar amounts of their sales. Respondent would further know the number and the comparative size of these competitors and whether they are substantially larger, smaller or of the approximate size of the respondent, and the extent of the sales competition which these manufacturers afforded respondent.[117]

58. The thrust of the Brake Shoe and Wellman merger is largely directed to the sintered metal friction material product sales market in the industrial or non-automotive field, and in the heavy duty vehicle segment of the automotive field.[118] Respondent's attack on the universe sales

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[117] As stated by the United States Supreme Court in the *Brown Shoe* case, 370 U.S. 294, at 342, footnote 69:

> "In summary, although appellant may point to technical flaws in the compilation of these statistics, we recognize that in cases of this type precision in detail is less important than the accuracy of the broad picture presented. We believe the picture as presented by the government in this case is adequate for making the determination required by Section 7: whether this merger *may* tend to lessen competition substantially in the relevant markets." (Emphasis by the Court.)

[118] The former President of Wellman, in response to a question at Tr. 615 as to what type of products might be offered for sale to truck and bus fleets, stated:

> "A. Well, we had brake blocks and clutches, but it must

figures submitted in Commission Exhibit No. 65, principally centers on the alleged substantially underestimated repair or replacement needs allocated to passenger cars and light trucks in the automotive field. These are the estimated figures which according to respondent's expert witness on statistical methods[119] are mainly responsible for the claimed distortion of the universe sales totals given in Commission Exhibit No. 65. Approximately one-third or better of respondent's Winchester, Virginia, plant organic friction materials are sold in the automotive replacement field through NAPA and a further sizeable portion finds its way there under the private brand of the Wagner Electric Corporation handled by respondent as an original equipment account. On the other hand, very few sales of the sintered metal friction materials produced by respondent's Cleveland, Ohio, plant were sold for replacement purposes, aside from those which were purchased by the original equipment manufacturers and distributed by them for after-market service.[120]

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be remembered that we were trying to service the heavy duty high energy field.

"Now, all trucks and fleets wouldn't necessarily come under that category, so that in certain areas certain particular applications would meet [*sic*] the pattern in which we were trying to service and others wouldn't be interested in it at all."

Also see the witness' further testimony as to sales in the industrial field at Tr. 3958-3987.

[119] Respondent's Proposed Findings of Fact, pp. 137-193. See particularly, Chart A on brakelining repair needs as estimated for the automotive field, Chart B on automotive transmission parts, and Chart C on automotive clutch facings. Respondent failed to call as witnesses any of the officials of its Marketing Research Department responsible for the background preparation of Comm. Ex. No. 65 and relied solely on an attack on its methodology by this statistical witness.

[120] See Respondent's Proposed Finding of Fact No. 149, at page 276, of Respondent's Proposed Findings of Fact, Conclusions of Law and Order.

59. The S. K. Wellman Company was a major manufacturer and seller of sintered metal friction material products principally in the non-automotive or industrial field, although its sales as shown in preceding Finding No. 5 for 1961 of $2,294,508 in brakelining, clutch facings and transmission parts for heavy duty use in the automotive field could not be considered insignificant. Wellman was a well-established seller whose products had extensive trade acceptance.[121] The industrial field is to be distinguished from the automotive field and particularly the industrial after-market or replacement system of distribution. Members of the one field do not normally compete with members in the other field.

Two automotive jobbers serviced through NAPA with respondent's organic friction material products were called by the respondent as witnesses. One testified that sales for off-the-road equipment was but a minute part of his business and that he did not have the trained personnel or the shop facilities to handle these large units. This witness did not consider himself to compete with the type of jobber or the dealer servicing such equipment, nor that they competed with him in the servicing of the light truck and passenger car field. The witness testified that since the merger neither Brake Shoe nor NAPA had attempted to sell him metallic friction ma-

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[121] A former Chief Engineer of the Marshall-Eclipse Division of the Bendix Corporation testified to the following with respect to the sintered metal friction materials produced by his company in competition with those produced by Wellman:

> "Q. You mentioned that your company produced smaller parts than the Wellman Company. Did you consider at any time the production of larger parts?
>
> "A. Yes, we did, but we decided that it was not the best approach to go and compete with Wellman. Wellman had established themselves well in this area. We didn't want to take on the champion. We thought we could get around them the other way by using the buttons." (Tr. 719)

terial products as distinguished from those made of organic friction materials.[122] The other automotive jobber also testified to servicing automobiles of all types and light trucks. The witness stated on occasion he did service some heavy trucks on certain items, but that he had not the trained personnel or shop facilities to service heavy off-the-road equipment and did not compete with the dealers selling and servicing such equipment. The witness was familiar with metallic friction materials but neither Brake Shoe nor NAPA had ever attempted to sell him such products.[123]

60. The S. K. Wellman Company, according to the testimony of its former President in this proceeding, was a substantial seller of sintered metal friction material products both to original equipment manufacturers and in competition with original equipment manufacturers in sales for the after-market servicing of such equipment. Wellman's annual sales volume was approximately 50% to the original equipment manufacturers and 50% to the after-market servicing such equipment.[124] Wellman, in addition to shipments from its main plant, leased 8 widely located storage warehouses and employed between 30 and 35 salesmen on a nation-wide basis. Wellman sold some 2000 or more jobber and equipment dealer customers

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[122] Tr. 4474-4476.

[123] Tr. 4484-4490.

[124] At Tr. 3979, it was stated:

"THE WITNESS: Let me put it this way. We were after sales dollars in the aftermarket and our position and our scaling up of our aftermarket sales force was pointed towards the industrial, heavy industrial market."

servicing the after-market.[125] Wellman was particularly successful in selling not only to the industrial jobber, but to the franchised dealer of the original equipment manufacturer selling and servicing the original equipment. In the last situation, Wellman was in direct competition with original equipment manufacturers in sales to their franchised dealers. It was here so successful that the witness estimated 40% of the 50% of Wellman's after-market sales went to these franchised dealers rather than industrial jobbers and in some areas a much higher percentage was sold.[126]

61. The barriers which must be hurdled by a new manufacturing entrant attempting to penetrate to any appreciable extent the concentrated market of sales of sintered metal friction materials to original equipment manufacturers and in the after-market in which Wellman does business are apparent. Friction Products Corporation, operated by a thoroughly experienced engineer with the necessary technical know how and equipment facilities, once before engaged in the production of sintered metal friction materials and attempting a re-entry in the market, made no sales in 1961 and sold but $7,750.00 in 1962.[127]

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[125] At Tr. 3980, in response to the question whether there were other suppliers of sintered metal friction materials to original equipment manufacturers also competing with Wellman for replacement sales, it was stated:

> "THE WITNESS: Raybestos-Manhattan was the prime one. We had some static and competition from GEMICO in the sintered metal field. We would get some competition from the asbestos people, Raybestos-Manhattan, Johns-Manville, Thermoid and all of these groups, trying to supply parts that would work, but we didn't feel were quite equal to what we had."

[126] Tr. 3958-3969; 3978-3987.

[127] Comm. Ex. No. 91 and Tr. 762-813. This witness from Friction Products Corporation formerly operated the Cleveland, Ohio, sintered metal friction materials plant acquired by Brake Shoe as shown in preceding Finding No. 27.

Compax, Inc., another attempted new entry into the sintered metal friction material production field after two and one-half years sold but $715.00.[128] A large manufacturer of off-the-road machinery, formerly producing sintered metal friction materials for its own requirements and the servicing of its dealers, discontinued production and obtains its present requirements from Wellman as satisfactorily and as cheaply as its own former costs of production.[129] Another large manufacturer of industrial equipment sold its sintered metal friction materials producing facilities to Wellman and since is a leading purchaser of these products from Wellman.[130] Still another large industrial equipment manufacturer and past producer of sintered metal friction materials discontinued this department and sold its facilities to Wellman and Raybestos-Manhattan, Inc.[131] Brake Shoe, a "deep purse pocket" manufacturer,[132] with an established sintered metal friction materials plant and products of wide trade accept-

[128] Tr. 3364-3389. Compax, Inc. and Friction Products Corporation are contended for as examples of new entrants, at pages 286-288 of Brake Shoe's Proposed Findings of Fact.

[129] Comm. Ex. No. 107 from the President, R. G. LeTourneau Co., and Tr. 1155.

[130] The Caterpillar Tractor Company, according to the former President of Wellman, at Tr. 655-656.

[131] The Clevite Corporation, at Tr. 2853.

[132] See testimony of the Chairman of the Board and the Chief Executive Officer of Brake Shoe at Tr. 475-476. Also see the testimony of the President of the Denison Division of Brake Shoe at Tr. 3671-3677. The July, 1966 Fortune Magazine Directory of the 500 largest U.S. Industrial Corporations, shows Brake Shoe in 1965 to have ranked No. 263 in size among these economically powerful corporations.

ance,[133] elected to acquire Wellman rather than attempt a deeper market penetration based on its own potentialities.[134]

62. The submarket for the production and sale of sintered metal friction materials is highly concentrated.

(a) Raybestos-Manhattan, Inc. ranked number 1 in Commission Exhibit No. 65 with estimated sales of $33,157,000 in all friction materials for 1960, sold $3,649,736 of sintered metal friction materials in 1960 according to Commission Exhibit No. 90 as prepared and furnished by said company.[135] In response to the request to list the names of all competitors in the manufacture of sintered metal friction materials, the exhibit names the following 6 competitors: Brake Shoe and Wellman, General Metals Powder Company, Bendix Corporation, Friction Products Company, and Moraine Products Division of General Motors Corporation.[136]

(b) The Bendix Corporation ranked number 2 in Commission Exhibit No. 65 with estimated sales of $16,155,000 in all friction materials for 1960, produced $2,181,300 of sintered metal friction materials in 1960 according to Commission Exhibit No. 103 as prepared and furnished by said company. The ex-

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[133] Comm. Ex. No. 10, under date of October 28, 1964, is a certification of the sintered metal friction material sales of Brake Shoe (including exports) by its Comptroller and shows the following:

Year ended December 31, 1960	$2,631,344
Year ended December 31, 1961	2,751,270
Year ended December 31, 1962	3,566,476
Year ended December 31, 1963	3,354,214

[134] See Findings Nos. 3, 4, 25, 31 and 36, supra.

[135] Sales of sintered metal friction materials were given in the exhibit as $4,926,030 for 1961, and $5,306,078 for 1962.

[136] See also Tr. 855.

hibit shows $1,951,600 of this production total to be used within the company.

The balance of $229,700 represented sales of $173,000 for automotive and off-the-road vehicles, and $56,700 for aircraft.[137] A former Chief Engineer of the Marshall-Elipse Division testified to the following 5 companies as being competitors of his division in the sale of sintered metal friction materials: Brake Shoe, Wellman, Raybestos-Manhattan, Inc., General Metals Powder, and the Delco Moraine Division of General Motors Corporation (Tr. 733).

(c) The American Brake Shoe Company ranked number 5 in Commission Exhibit No. 65 with sales of $11,791,000 for 1960. Brake Shoe sold $2,631,344 of sintered metal friction materials in 1960 according to Commission Exhibit No. 10 prepared by said company.[138] Brake Shoe's numerous contended for competitors in the sintered metal friction materials field are listed on Commission Exhibit No. 100.[139]

(d) General Motors Corporation is ranked number 6 in Commission Exhibit No. 65 with estimated sales in all friction materials of $10,924,000 for 1960. Commission Exhibit No. 94 as prepared and furnished by General Motors for its Delco Moraine Division

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[137] Production of sintered metal friction materials for 1961 was given as $1,406,400, of which $1,268,400 was used by the company. The remaining balance of $138,000 showed sales of $112,500 for automotive and off-the-road vehicles, and $25,500 for aircraft. In 1962 production figures totaled $1,880,900 with $1,640,900 used by the company. The balance of $240,000 showed sales of $209,700 for automotive and off-the-road vehicles and $30,300 for aircraft.

[138] Sales of sintered metal friction materials were $2,751,270 for 1961, and $3,566,476 for 1962.

[139] See preceding Finding No. 23, and in particular, footnotes 66, 69, 70, 75, 76, 77, 81 and 86 limited to those who produced sintered metal friction materials.

shows a total production of sintered metal friction materials of only $90,974 for 1960, $431,921 for 1961, and $450,662 for 1962. The exhibit states the following:

"The above figures show the value, for accounting purposes, at which automotive parts containing sintered metal friction materials are transferred from Delco Moraine Division to other General Motors Divisions. No such products are sold to purchasers outside General Motors Corporation.

"Other General Motors Divisions produce parts using sintered metal materials in substantial quantities. These are for other purposes than friction surfaces and, accordingly, it is our understanding that such data were not desired."

The exhibit names but 3 competitors, the S. K. Wellman Company, Raybestos-Manhattan, Inc., and the Rockford Clutch Division of Borg-Warner Corporation.[140]

(c) The S. K. Wellman Company is ranked No. 8 in Commission Exhibit No. 65. Its total sales of sintered metal friction materials as shown in footnote 26, supra, were $11,775,775 in 1960, $12,146,319 in 1961, $12,421,240 in 1962, and $12,730,408 in 1963.

The former President of Wellman testified the following companies to be competitors at the time of acquisition: Raybestos-Manhattan, Inc., Delco Moraine Division of General Motors, Marshall Eclipse Division of Bendix Corporation, American Brake Shoe Company, Friction Products Company, General Metals Powder Company, Amplex Division of Chrysler Corporation, and R. G. LeTourneau Co.[141]

[140] Comm. Ex. No. 87 shows Borg-Warner Corporation to be the second leading customer of S.K. Wellman Company in 1960 and 1961 for sintered metal friction material industrial clutch facings.

[141] Tr. 655-658.

(f) General Metals Powder Company is ranked number 14 in estimated[142] friction material sales of $2,000,000 for 1960 in Commission Exhibit No. 65. Commission Exhibit No. 89, as prepared and furnished by the said company, shows its actual sales of sintered metal friction materials to have been $1,451,312.65 for 1960, $1,581,440.87 for 1961, and $1,916,921.38 for 1962. The exhibit lists but 3 companies as competitors in the sale of sintered metal friction materials: Wellman, Raybestos-Manhattan, Inc., and Friction Products Corporation.

(g) Chrysler Corporation, which is ranked number 22 in Commission Exhibit No. 65 with estimated sales of $750,600 for 1960, had but little sales of sintered metal friction materials. As is shown on Commission Exhibit No. 93 prepared and furnished by the said company, sales were $541.00 in 1960, $2,289.00 in 1961, and $1,243.00 in 1962. The exhibit states Chrysler to believe the following 6 companies to be manufacturers of sintered metal friction materials: Raybestos-Manhattan, Inc., Thermoid Division of H. K. Porter Company, Inc., Powdercraft Corporation, Moraine Products Division of General Motors Corporation, Marshall-Eclipse Division of Bendix Corporation, American Brakeblok Division and the S. K. Wellman Division of American Brake Shoe Company.

(h) Friction Products Corporation is not named in Commission Exhibit No. 65.[143] Commission Exhibit No. 91 as prepared and furnished by the company states it was formed in October 1961 and did not begin

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[142] See footnote 116, supra, with reference to Brake Shoe's estimation of competitors' sales in preparing the universe in Comm. Ex. No. 65.

[143] See Finding No. 27 and footnote 92, supra.

production shipments until near the end of 1962. Sales for 1962 were given as $7,750.00. The exhibit names 6 competitors of the company in the sale of sintered metal friction materials: Raybestos-Manhattan, Inc., S. K. Wellman, American Brake Shoe Company, General Metals Powder Company, Marshall-Eclipse Division of Bendix Corporation, and the Amplex Division of Chrysler Corporation.

(i) R. G. LeTourneau & Co.[144] is not named on Commission Exhibit No. 65. Commission Exhibit No. 107 from its company President states: "We have manufactured some sintered lining as described but at the present are buying them from Wellman."

(j) Powdercraft Corporation is not named in Commission Exhibit No. 65.[145] The testimony of the witness from this company is controversial as to when and what amount of sintered metal friction materials Powdercraft may have produced.[146] The Witness stated Powdercraft's annual sales to approximate $1,000,000 principally in structural parts and bearings. The following appears at Tr. 1066:

"Q. Mr. Robinson, you testified on direct examination that your company manufactures structural parts and bearings principally.

"Could you tell us what the percentage of your production is devoted to what you referred to as friction parts?

"A. No, I can't tell you.

"Q. Can you give us your best estimate, sir?

"A. Oh, best estimate would be—it would be very hard to tell without looking at every piece we make, say 20 or 25 per cent."

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[144] Tr. 1147.

[145] See footnote 84, supra.

[146] Tr. 1022-1023; 1028; 1058-1059; 1064-1066.

63. Submitted with complaint counsel's Proposed Findings of Fact is a tabulation entitled, 'Total Shipments and Market Shares of Companies Manufacturing Sintered Metal Friction Materials.'[147] The tabulation covers the years 1960, 1961 and 1962 with respect to the American Brake Shoe Company, S. K. Wellman Company, Raybestos-Manhattan, Inc., Bendix Corporation, General Metals Powder Company, General Motors Corporation, Friction Products Corporation, Chrysler Corporation and R. G. LeTourneau & Co.[148] This tabulation is incorporated in and made part of these findings of fact and is attached as an appendix to this initial decision.[149]

The tabulation shows, for each year, 1960, 1961 and 1962, a series of three columns of figures captioned respectively, Used by the Company, All other Shipments, and Total Shipments. The first column shows for each year the amount of each company's production used internally. The second column computes the amount of shipments by each company for each year, minus the amount of production used internally. The third column computes the total shipments by each company for each year including the production amount used internally.

Under these series of three columns are another series of three columns, entitled, Market Shares (in percent) for each of the years 1960, 1961 and 1962. The first column

[147] This tabulation was the subject of considerable discussion between the hearing examiner and respective counsel during the oral argument on July 15, 1966. Tr. 4667-4669; 4671-4676; 4680-4684; 4692-4712; 4715-4731.

[148] The tabulation at footnote 2 therein makes an allowance for Powdercraft Corporation's estimated annual sales of friction parts as being $250,000 or 25% of its approximately $1,000,000 annual sales of all products. The addition or elimination of this "allowance" would make but little difference in the submarket product universes.

[149] See footnote 147, supra.

for each year shows the percentage of total production used within each company. The second and third columns show the market share percentages of the submarket universes obtained by each company for that year computed as above described.

For example, in the year 1960, column one shows that Bendix Corporation used 91.5% of its total production internally. This reduces the submarket universe by a corresponding amount in the second column. The Bendix market share here amounts to 1.3% of the submarket universe. The internal amount of total production used by Bendix is not eliminated from the submarket universe in the third column. The Bendix market share here amounts to 10.6% of the submarket universe.

Brake Shoe and Wellman used none of their total production internally during the years 1960, 1961, and 1962. In 1960 Brake Shoe's shipments totaled $2,620,356 and Wellman's $10,393,746. The combination of these amounts for 1960 totaled $13,024,102. Brake Shoe obtained 14.3% and Wellman 56.6% of the submarket universe in the second column. Their combined market share was 71.0% of the submarket universe. Brake Shoe obtained 12.8% and Wellman 50.7% of the submarket universe in the third column. Their combined market share was 63.6% of the submarket universe. This dominant share of the submarket of sintered metal friction materials continued in 1961 and 1962 as is shown on the tabulation.

64. Commission Exhibit No. 65, at page 5, shows Brake Shoe's Marketing Research Department to place Brake Shoe and Wellman as the 5th and 8th ranking sellers in the total friction materials market. The exhibit, at page 8, shows Brake Shoe to have a 7.6% share and Wellman a 6.7% share of this market. The combination gives Brake Shoe-Wellman a 14.3% market share and would advance it to be the 2nd ranking seller in the relevant product market. The exhibit further shows this market to be highly

concentrated at the top. The first 10 sellers in the market account for an 84.0% share of the entire market. The result of the Brake Shoe-Wellman combination in the relevant product submarket for sintered metal friction materials is set forth in the tabulation discussed in preceding finding No. 63, and appended to this initial decision.

In applying a more stringent Sherman Act test, the United States Supreme Court in *United States* v. *First National Bank & Trust Co. of Lexington*, 376 U.S. 665, at 673, held:

> "Where, as here, the merging companies are major competitive factors in a relevant market, the elimination of significant competition between them constitutes a violation of § 1 of the Sherman Act."

In *United States* v. *Philadelphia National Bank*, 374 U.S. 321, at 362, the Court stated:

> "We noted in *Brown Shoe Co., supra*, at 315, that '[t]he dominant theme pervading congressional consideration of the 1950 amendments [to § 7] was a fear of what was considered to be a rising tide of economic concentration in the American economy.' This intense congressional concern with the trend toward concentration warrants dispensing, in certain cases, with elaborate proof of market structure, market behavior, or probable anticompetitive effects. Specifically, we think that a merger which produces a firm controlling an undue percentage share of the relevant market, and results in a significant increase in the concentration of firms in that market, is so inherently likely to lessen competition substantially that it must be enjoined in the absence of evidence clearly showing that the merger is not likely to have such anticompetitive effects. See *United States* v. *Koppers Co.*, 202 F. Supp. 437 (D.C. W.D. Pa. 1962)."

Recent Supreme Court opinions have laid down specific guidelines with relation to the market shares tests

which are to be applied in the instant proceeding. In *United States v. Von's Grocery Company, et al*, 384 U.S. 270, at page 281, the concurring opinion states in short summary ". . . that where the eight leading firms have over 40% of the market, any merger between the leaders or between one of them and a lesser company is vulnerable under § 7, absent some special proof to the contrary. Here Von's acquired Shopping Bag. Both were among the eight largest companies, both had grown substantially since 1948 and they were substantial competitors. After the merger the four largest firms had 28.8%, the eight largest had 44% and the 12 largest had 50%. The merger not only disposed of a substantial competitor but increased the concentration in the leading firms. In my view the Government made out a prima facie case that the effect of this merger may be substantially to lessen competition or to tend to create a monopoly."

United States v. *Pabst Brewing Company, et al* (June 13, 1966)[150] cites *Von's Grocery* and the Opinion states in part: ". . . In 1958, the year of the merger, Pabst was the tenth largest brewer in the Nation and Blatz ranked eighteenth. The merger made Pabst the Nation's fifth largest brewer with 4.49% of the industry's total sales. By 1961, three years after the merger, Pabst had increased its share of the beer market to 5.83% and had become the third largest brewer in the country . . .". The concurring opinion of Mr. Justice White states most succinctly: "I join the Court's opinion insofar as it holds the merger of Pabst and Blatz may substantially lessen competition in the beer industry in the Nation as a whole."

In comparison with the foregoing market share pictures shown in the *Von's Grocery* and *Pabst* cases, in the instant proceeding Brake Shoe and Wellman were the fifth and eighth ranking sellers in the total national friction materials market in 1960. Brake Shoe had a 7.6% share and

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[150] CCH 1966 Trade Regulation Reports ¶ 71,790.

Wellman a 6.7% share which resulted in a combined share of 14.3% of the total relevant product market. This market share of 14.3% would advance the combination to second place in the total friction materials market.[151] In the relevant product submarket of sintered metal friction materials on a national basis in 1960, Wellman was the number one seller and Brake Shoe the third ranking seller. That the market is highly concentrated with but very few manufacturing sellers is evident and leaves but little doubt from a reading of the appended tabulation. The appended tabulation shows this situation continued in 1961 and 1962, and that the combination of Brake Shoe and Wellman for all three years would control from a minimum share of 60.4% to a maximum share of 71.0% of the entire submarket of sintered metal friction materials.

While the relevant product market for total friction materials is not as extremely concentrated in number of sellers as the relevant product submarket for sintered metal friction materials, it does present a highly concentrated market picture among its top sellers. Commission Exhibit No. 65, at page 5, shows that in the total friction materials market for 1960, three sellers accounted for a 40.1% market share and five sellers, of which Brake Shoe was one, accounted for a 55.7% share of the total market. Ten sellers, which included both Brake Shoe and Wellman, accounted for an 84.0% share if the entire relevant product market. The combination of Brake Shoe-Wellman with a 14.3% share would advance to second place in sales, and this would give the first three sellers a 46.0% share of the total friction materials market. The exhibit at page 7 further shows that in the total friction materials market for 1961, that the Brake Shoe-Wellman 14.3% share would give the first three sellers a 45.9% share of the total fric-

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[151] Comm. Ex. No. 65, page 8, shows this combination percentage of 14.3% of the relevant product market did not decline in 1961 and 1962.

tion materials market. The top ten sellers, which include both Brake Shoe and Wellman, would account for an 83.9% share of the total friction materials market. Adopting as we must the guidelines laid down in *Von's Grocery* and *Pabst*, the merger of Wellman into Brake Shoe demonstrates the like competitive end effects found and prohibited in those recent Supreme Court cases.

65. Based on the testimony and the evidence of record and the preceding findings of fact, the hearing examiner finds that the preponderance of the probative and substantial credible evidence in this proceeding shows, that in each of the lines of commerce comprising the relevant product market of friction materials and the relevant product submarket of sintered metal friction materials, the effect of the acquisition of Wellman by Brake Shoe may be substantially to lessen competition, or tend to create a monopoly throughout the United States in each of the said lines of commerce and the said relevant product market and submarket.

Conclusions

1. The acquisition of The S. K. Wellman Company by the American Brake Shoe Company, as alleged in the complaint, constitutes a violation of Section 7 of the Clayton Act (U.S.C. Title 15, Section 18), as amended.

2. An order of divestiture should be issued in the form set forth in the Notice of the complaint and therein stated as being the order which the Commission had reason to believe should issue if the facts are found to be as alleged in the complaint.

Order

It Is Ordered that respondent, American Brake Shoe Company (now known as Abex Corporation), shall, within six months from the date of service upon it of this order, divest itself absolutely and in good faith to a purchaser or purchasers approved by the Federal Trade Commis-

sion, of all stock and of all right, title and interest in all assets, properties, rights and privileges, acquired by respondent as a result of its acquisition of the stock and assets of The S. K. Wellman Company, so as to restore that which formerly made up the Wellman Company as a viable competitive entity in the friction materials and sintered metal friction materials industries in the United States.

IT IS FURTHER ORDERED that respondent shall not sell or transfer the aforesaid stock or assets, directly or indirectly, to anyone who at the time of divestiture is a stockholder, officer, director, employee, or agent of or otherwise directly or indirectly connected with or under the control or influence of respondent.

IT IS FURTHER ORDERED that pending divestiture, respondent shall not make any changes nor permit any deterioration in any of the plants, machinery, buildings, equipment or other property or assets of the former Wellman Company which may impair present rated capacity or their market value, unless such capacity or value is restored prior to divestiture.

IT IS FURTHER ORDERED that for a period of ten (10) years from the date of issuance of this order, respondent shall cease and desist from acquiring, directly or indirectly, through subsidiaries or otherwise, without the prior approval of the Federal Trade Commission, the whole or any part of the stock, share capital, or assets of any corporation engaged in commerce and in the production or sale of friction material.

/s/ Eldon P. Schrup
ELDON P. SCHRUP
Hearing Examiner

August 19, 1966

TOTAL SHIPMENTS AND MARKET SHARES OF COMPANIES MANUFACTURING SINTERED METAL FRICTION MATERIALS 1960-1962

Dollar Shipments[1] (f.o.b. plant)

Company	1960 Used by the company	1960 All other shipments	1960 Total shipments	1961 Used by the company	1961 All other shipments	1961 Total shipments	1962 Used by the company	1962 All other shipments	1962 Total shipments
American Brake Shoe Co. (CX 10a, b)*	$ 0	$ 2,630,356	$ 2,630,356	$ 0	$ 2,750,008	$ 2,750,008	$ 0	$ 3,517,440	$ 3,517,440
S. K. Wellman Co. (CX 10b, 11)*	0	10,393,746	10,393,746	0	10,676,845	10,676,845	0	11,187,086	11,187,086
Sub-total, 2 companies*	$ 0	$13,024,102	$13,024,102	$ 0	$13,426,853	$13,426,853	$ 0	$14,704,526	$14,704,526
Raybestos-Manhattan, Inc. (CX 90d)	0	3,649,730	3,649,730	0	4,926,030	4,926,030	0	5,306,078	5,306,078
The Bendix Corp. (CX 103c)	1,951,600	229,700	2,181,300	1,268,400	138,000	1,406,400	1,640,900	240,090	1,880,990
General Metals Powder Co. (CX 89a)	0	1,451,313	1,451,313	0	1,581,441	1,581,441	0	1,916,921	1,916,921
General Motors Corp. (CX 94e)	90,974	0	90,974	131,931	0	131,931	450,662	0	450,662
Friction Products Corp. (CX 91d)[1]	—	—	—	—	—	—	—	—	7,750
Chrysler Corp. (CX 93d)	0	541	541	0	2,289	2,289	0	1,243	1,243
R. G. LeTourneau & Co. (Tr. 1147)	90,000	0	90,000	90,000	0	90,000	90,000	0	90,000
Total[2]	$2,132,574	$18,355,386	$20,487,960	$1,490,331	$20,074,613	$21,564,941	$2,181,562	$22,168,768	$21,358,170

Market Shares (in percent)

American Brake Shoe Co.*	0%	14.3%	12.8%	0%	13.7%	12.8%	0%	15.9%	14.4%
S. K. Wellman Co.*	0	56.6	50.7	0	53.2	49.5	0	50.5	45.9
Sub-total, 2 companies*	0%	71.0%	63.6%	0%	66.9%	62.3%	0%	66.3%	60.4%
Raybestos-Manhattan, Inc.	0	19.9	17.8	0	24.5	22.8	0	23.9	21.8
The Bendix Corp.	91.5	1.3	10.6	85.1	0.7	6.5	75.2	1.1	7.7
General Metals Powder Co.	0	7.9	7.1	0	7.9	7.3	0	8.6	7.9
General Motors Corp.	4.3	0	0.4	8.9	0	0.6	20.7	0	1.9
Friction Products Corp.[1]	—	—	—	—	—	—	—	—	—[3]
Chrysler Corp.	0	—[3]	—[3]	0	—[3]	—[3]	0	—[3]	—[3]
R. G. LeTourneau & Co.[4]	4.2	0	0.4	6.0	0	0.4	4.1	0	0.4
Total[2]	100.0%	100.1%	99.9%	100.0%	100.0%	99.9%	100.0%	99.9%	100.1%

* Excludes exports.

[1] Organized in October 1961 and started production in 1962.

[2] If Powdercraft Corp.'s estimated annual shipments of friction parts amounting to $250,000 are included in "Total shipments," Powdercraft would account for 1.1% in 1960, 1.1% in 1961, and 1.0% in 1962. (Tr. 1066)

[3] Less than 0.1%.

[4] LeTourneau has ceased manufacture (CX 107).

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FEDERAL TRADE COMMISSION

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ON PETITION FOR A WRIT OF CERTIORARI TO THE UNITED STATES COURT OF APPEALS FOR THE SIXTH CIRCUIT

[redacted]

BRIEF FOR THE FEDERAL TRADE COMMISSION IN OPPOSITION

[redacted]

[redacted]
Solicitor General

[redacted]
Assistant Attorney General

[redacted]

[redacted]

[redacted]
Washington, D.C. [redacted]

[redacted]